

**NMED AIR QUALITY APPLICATION  
NSR SIGNIFICANT REVISION  
DURANGO MIDSTREAM, LLC  
DAGGER DRAW GAS PLAN**



**Prepared By:**

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January 2022

Project 213201.0161





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January 18, 2022

Rhonda V. Romero  
Minor Source Section Manager  
NMED Air Quality Bureau  
525 Camino de los Marquez Suite 1  
Santa Fe, NM 87505-1816

RE: *Application for NSR Significant Revision*  
*Frontier Field Services, LLC – Dagger Draw Gas Plant*

Ms. Romero,

On behalf of Frontier Field Services, LLC we are submitting this application for an NSR Significant Revision to the existing Dagger Draw Gas Plant. This submittal is pursuant to 20.2.72.219.D.1.a NMAC. The facility is currently permitted under NSR No. 0001-M7R2. This facility is located approximately 9.2 miles southwest of Artesia, New Mexico in Eddy County. Modifications proposed under this significant revision application consist of installation of six compressor engines, an amine unit, three heaters, and updated emissions for increased throughput for the existing amine unit, glycol dehydrator, and correct nomenclature for existing heaters.

The format and content of this application are consistent with the Bureau's current policy regarding NSR applications; it is a complete application package using the most current application forms. Enclosed is one hard copy and one working copy of the application, including an original certification page, one disk containing the electronic files. On December 15, 2021, NMED had a conference call with Frontier Field services to inform Frontier that the GCP-O&G application, which was submitted to NMED on November 15, 2021 could not be issued due to the inclusion of an acid injection well (AGI) within the application. However, Ms. Romero stated that the original application could be carried over to be used for this NSR Signification Revision application and that Ms. Romero would work with her staff to expedite the NSR application upon receipt. NMED issued a denial of Air Quality GCP Registration No. 0001M10 for the Dagger Draw Gas Plant on December 16, 2021. Please feel free to contact me at (505) 266-6611 or by email at [aerenstein@trinityconsultants.com](mailto:aerenstein@trinityconsultants.com) if you have any questions regarding this application. Alternatively, you may contact Darin B. Kennard with Frontier Field Services, LLC at (346) 351-2790 or by email at [DKennard@durangomidstream.com](mailto:DKennard@durangomidstream.com).

Sincerely,

Adam Erenstein  
Manager of Consulting Services

Cc: Darin B. Kennard (Frontier Field Services, LLC)  
Trinity Project File 213201.0161

<b>Mail Application To:</b>  New Mexico Environment Department Air Quality Bureau Permits Section 525 Camino de los Marquez, Suite 1 Santa Fe, New Mexico, 87505  Phone: (505) 476-4300 Fax: (505) 476-4375 www.env.nm.gov/aqb		<b>For Department use only:</b>          AIRS No.:
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## Universal Air Quality Permit Application

### Use this application for NOI, NSR, or Title V sources.

Use this application for: the initial application, modifications, technical revisions, and renewals. For technical revisions, complete Sections, 1-A, 1-B, 2-E, 3, 9 and any other sections that are relevant to the requested action; coordination with the Air Quality Bureau permit staff prior to submittal is encouraged to clarify submittal requirements and to determine if more or less than these sections of the application are needed. Use this application for streamline permits as well. **See Section 1-I for submittal instructions for other permits.**

**This application is submitted as** (check all that apply): ☐ Request for a No Permit Required Determination (no fee)  
☐ **Updating** an application currently under NMED review. Include this page and all pages that are being updated (no fee required).  
 Construction Status: ☐ Not Constructed ☒ Existing Permitted (or NOI) Facility ☐ Existing Non-permitted (or NOI) Facility  
 Minor Source: ☐ a NOI 20.2.73 NMAC ☒ 20.2.72 NMAC application or revision ☐ 20.2.72.300 NMAC Streamline application  
 Title V Source: ☐ Title V (new) ☐ Title V renewal ☐ TV minor mod. ☐ TV significant mod. TV Acid Rain: ☐ New ☐ Renewal  
 PSD Major Source: ☐ PSD major source (new) ☐ minor modification to a PSD source ☐ a PSD major modification

### Acknowledgements:

- ☒ I acknowledge that a pre-application meeting is available to me upon request. ☐ Title V Operating, Title IV Acid Rain, and NPR applications have no fees.
- ☐ \$500 NSR application Filing Fee enclosed **OR** ☐ The full permit fee associated with 10 fee points (required w/ streamline applications).
- ☐ Check No.: **N/A in the amount of Application fee from GCP-O&G Application will be applied.**
- ☒ I acknowledge the required submittal format for the hard copy application is printed double sided 'head-to-toe', 2-hole punched (except the Sect. 2 landscape tables is printed 'head-to-head'), numbered tab separators. Incl. a copy of the check on a separate page.
- ☒ I acknowledge there is an annual fee for permits in addition to the permit review fee: [www.env.nm.gov/air-quality/permit-fees-2/](http://www.env.nm.gov/air-quality/permit-fees-2/).
- ☐ This facility qualifies for the small business fee reduction per 20.2.75.11.C. NMAC. The full \$500.00 filing fee is included with this application and I understand the fee reduction will be calculated in the balance due invoice. The Small Business Certification Form has been previously submitted or is included with this application. (Small Business Environmental Assistance Program Information: [www.env.nm.gov/air-quality/small-biz-eap-2/](http://www.env.nm.gov/air-quality/small-biz-eap-2/).)

**Citation:** Please provide the **low level citation** under which this application is being submitted: **20.2.72.219.D.1.a NMAC** (e.g. application for a new minor source would be 20.2.72.200.A NMAC, one example for a Technical Permit Revision is 20.2.72.219.B.1.b NMAC, a Title V acid rain application would be: 20.2.70.200.C NMAC)

## Section 1 – Facility Information

### Section 1-A: Company Information

		<b>AI #</b> if known (see 1 <sup>st</sup> 3 to 5 #s of permit IDEA ID No.):36536	<b>Updating</b> Permit/NOI #:NSR-0001-M7R2
1	Facility Name: Dagger Draw Gas Plant	Plant primary SIC Code (4 digits): 1311  Plant NAIC code (6 digits):211120	
a	Facility Street Address (If no facility street address, provide directions from a prominent landmark): 278 Pipeline Rd, Artesia, NM 88210.		
2	Plant Operator Company Name: Frontier Field Services, LLC	Phone/Fax: 575-677-5108	
a	Plant Operator Address: 1001 Conoco Road, Maljamar, NM 88264		

b	Plant Operator's New Mexico Corporate ID or Tax ID:	
3	Plant Owner(s) name(s): Frontier Field Services, LLC	Phone/Fax: 346-224-2459
a	Plant Owner(s) Mailing Address(s): 10077 Grogans Mill Road, Suite 300, The Woodlands, TX 77380	
4	Bill To (Company): Frontier Field Services, LLC	Phone/Fax: 346-224-2459
a	Mailing Address: 10077 Grogans Mill Road, Suite 300, The Woodlands, TX 77380	E-mail: mtaylor@durangomidstream.com
5	<input type="checkbox"/> Preparer: <input checked="" type="checkbox"/> Consultant: Trinity Consultants, Adam Erenstein	Phone/Fax: (505) 266-6611
a	Mailing Address: 9400 Holly Ave NE, Bldg. 3, Suite 300, Albuquerque, NM 87122	E-mail: <a href="mailto:aerenstein@trinityconsultants.com">aerenstein@trinityconsultants.com</a>
6	Plant Operator Contact: John Prentiss	Phone/Fax: 575-677-5108
a	Mailing Address: 1001 Conoco Road, Maljamar, NM 88264	E-mail: JPrentiss@durangomidstream.com
7	Air Permit Contact <sup>1</sup> : Darin B. Kennard	Title: Vice President & GM
a	E-mail: DKennard@durangomidstream.com	Phone/Fax: 346-351-2790/N/A
b	Mailing Address: 10077 Grogans Mill Road, Suite 300, The Woodlands, TX 77380	
c	The designated Air permit Contact will receive all official correspondence (i.e. letters, permits) from the Air Quality Bureau.	

## Section 1-B: Current Facility Status

1.a	Has this facility already been constructed? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1.b If yes to question 1.a, is it currently operating in New Mexico? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
2	If yes to question 1.a, was the existing facility subject to a Notice of Intent (NOI) (20.2.73 NMAC) before submittal of this application? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes to question 1.a, was the existing facility subject to a construction permit (20.2.72 NMAC) before submittal of this application? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
3	Is the facility currently shut down? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, give month and year of shut down (MM/YY): N/A
4	Was this facility constructed before 8/31/1972 and continuously operated since 1972? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5	If Yes to question 3, has this facility been modified (see 20.2.72.7.P NMAC) or the capacity increased since 8/31/1972? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
6	Does this facility have a Title V operating permit (20.2.70 NMAC)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, the permit No. is: P-157-R3-M1
7	Has this facility been issued a No Permit Required (NPR)? <input type="checkbox"/> Yes <input type="checkbox"/> No	If yes, the NPR No. is: N/A
8	Has this facility been issued a Notice of Intent (NOI)? <input type="checkbox"/> Yes <input type="checkbox"/> No	If yes, the NOI No. is: N/A
9	Does this facility have a construction permit (20.2.72/20.2.74 NMAC)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, the permit No. is: NSR-0001-M7R2
10	Is this facility registered under a General permit (GCP-1, GCP-2, etc.)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, the register No. is: N/A

## Section 1-C: Facility Input Capacity & Production Rate

1	What is the facility's maximum input capacity, specify units (reference here and list capacities in Section 20, if more room is required)			
a	Current	Hourly: 1.67 MMSCF	Daily: 40 MMSCF	Annually: 14,600 MMSCF
b	Proposed	Hourly: 3.75 MMSCF	Daily: 90 MMSCF	Annually: 32,850 MMSCF
2	What is the facility's maximum production rate, specify units (reference here and list capacities in Section 20, if more room is required)			
a	Current	Hourly: 1.67 MMSCF	Daily: 40 MMSCF	Annually: 14,600 MMSCF



b	Proposed	Hourly: 3.75 MMSCF	Daily: 90 MMSCF	Annually: 32,850 MMSCF
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## Section 1-D: Facility Location Information

1	Section: 25	Range: 25E	Township: 18S	County: Eddy	Elevation (ft): 3,465
2	UTM Zone: <input type="checkbox"/> 12 or <input checked="" type="checkbox"/> 13			Datum: <input type="checkbox"/> NAD 27 <input checked="" type="checkbox"/> NAD 83 <input type="checkbox"/> WGS 84	
a	UTM E (in meters, to nearest 10 meters): 551,933 m E			UTM N (in meters, to nearest 10 meters): 3,619,808 m	
b	AND Latitude (deg., min., sec.): 32°42'53''			Longitude (deg., min., sec.): -104°26'45''	
3	Name and zip code of nearest New Mexico town: Artesia, NM 88210				
4	Detailed Driving Instructions from nearest NM town (attach a road map if necessary): From Artesia, NM head south on Highway 285 for 9.2 miles then turn right onto Kincaid rd and continue for 2.5 miles to facility.				
5	The facility is 9.2 miles southwest of Artesia, NM 88210.				
6	Status of land at facility (check one): <input checked="" type="checkbox"/> Private <input type="checkbox"/> Indian/Pueblo <input type="checkbox"/> Federal BLM <input type="checkbox"/> Federal Forest Service <input type="checkbox"/> Other (specify)				
7	List all municipalities, Indian tribes, and counties within a ten (10) mile radius (20.2.72.203.B.2 NMAC) of the property on which the facility is proposed to be constructed or operated: Artesia, NM; Eddy County				
8	20.2.72 NMAC applications <b>only</b> : Will the property on which the facility is proposed to be constructed or operated be closer than 50 km (31 miles) to other states, Bernalillo County, or a Class I area (see <a href="http://www.env.nm.gov/aqb/modeling/classIareas.html">www.env.nm.gov/aqb/modeling/classIareas.html</a> )? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (20.2.72.206.A.7 NMAC) If yes, list all with corresponding distances in kilometers: N/A				
9	Name nearest Class I area: Carlsbad Caverns National Park				
10	Shortest distance (in km) from facility boundary to the boundary of the nearest Class I area (to the nearest 10 meters): 57.05 km				
11	Distance (meters) from the perimeter of the Area of Operations (AO is defined as the plant site inclusive of all disturbed lands, including mining overburden removal areas) to nearest residence, school or occupied structure: 1,158 m				
12	Method(s) used to delineate the Restricted Area: Continuous fencing and gated entrance.  "Restricted Area" is an area to which public entry is effectively precluded. Effective barriers include continuous fencing, continuous walls, or other continuous barriers approved by the Department, such as rugged physical terrain with steep grade that would require special equipment to traverse. If a large property is completely enclosed by fencing, a restricted area within the property may be identified with signage only. Public roads cannot be part of a Restricted Area.				
13	Does the owner/operator intend to operate this source as a portable stationary source as defined in 20.2.72.7.X NMAC? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No A portable stationary source is not a mobile source, such as an automobile, but a source that can be installed permanently at one location or that can be re-installed at various locations, such as a hot mix asphalt plant that is moved to different job sites.				
14	Will this facility operate in conjunction with other air regulated parties on the same property? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes If yes, what is the name and permit number (if known) of the other facility?				

## Section 1-E: Proposed Operating Schedule (The 1-E.1 & 1-E.2 operating schedules may become conditions in the permit.)

1	Facility <b>maximum</b> operating ( $\frac{\text{hours}}{\text{day}}$ ): 24	( $\frac{\text{days}}{\text{week}}$ ): 7	( $\frac{\text{weeks}}{\text{year}}$ ): 52	( $\frac{\text{hours}}{\text{year}}$ ): 8,760
2	Facility's maximum daily operating schedule (if less than 24 $\frac{\text{hours}}{\text{day}}$ )? Start: N/A		<input type="checkbox"/> AM <input type="checkbox"/> PM	End: N/A <input type="checkbox"/> AM <input type="checkbox"/> PM
3	Month and year of anticipated start of construction: N/A			
4	Month and year of anticipated construction completion: N/A			
5	Month and year of anticipated startup of new or modified facility: N/A			
6	Will this facility operate at this site for more than one year? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			

**Section 1-F: Other Facility Information**

1	Are there any current Notice of Violations (NOV), compliance orders, or any other compliance or enforcement issues related to this facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, specify: N/A		
a	If yes, NOV date or description of issue: N/A	NOV Tracking No: N/A	
b	Is this application in response to any issue listed in 1-F, 1 or 1a above? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, provide the 1c & 1d info below:		
c	Document Title: N/A	Date: N/A	Requirement # (or page # and paragraph #): N/A
d	Provide the required text to be inserted in this permit: N/A		
2	Is air quality dispersion modeling or modeling waiver being submitted with this application? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
3	Does this facility require an "Air Toxics" permit under 20.2.72.400 NMAC & 20.2.72.502, Tables A and/or B? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
4	Will this facility be a source of federal Hazardous Air Pollutants (HAP)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
a	If Yes, what type of source? <input type="checkbox"/> Major ( <input type="checkbox"/> ≥10 tpy of any single HAP OR <input type="checkbox"/> ≥25 tpy of any combination of HAPS) <input checked="" type="checkbox"/> Minor ( <input checked="" type="checkbox"/> <10 tpy of any single HAP AND <input checked="" type="checkbox"/> <25 tpy of any combination of HAPS)		
5	Is any unit exempt under 20.2.72.202.B.3 NMAC? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
a	If yes, include the name of company providing commercial electric power to the facility: _____ Commercial power is purchased from a commercial utility company, which specifically does not include power generated on site for the sole purpose of the user.		

**Section 1-G: Streamline Application**

(This section applies to 20.2.72.300 NMAC Streamline applications only)

1	<input type="checkbox"/> I have filled out Section 18, "Addendum for Streamline Applications." <input checked="" type="checkbox"/> N/A (This is not a Streamline application.)
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**Section 1-H: Current Title V Information - Required for all applications from TV Sources**

(Title V-source required information for all applications submitted pursuant to 20.2.72 NMAC (Minor Construction Permits), or 20.2.74/20.2.79 NMAC (Major PSD/NNSR applications), and/or 20.2.70 NMAC (Title V))

1	Responsible Official (R.O.) (20.2.70.300.D.2 NMAC): Darin B. Kennard		Phone: 346-351-2790
a	R.O. Title: Vice President & GM	R.O. e-mail: DKennard@durangomidstream.com	
b	R. O. Address: 10077 Grogans Mill Road, Suite 300, The Woodlands, Texas 77380		
2	Alternate Responsible Official (20.2.70.300.D.2 NMAC): N/A		Phone: N/A
a	A. R.O. Title: N/A	A. R.O. e-mail: N/A	
b	A. R. O. Address: N/A		
3	Company's Corporate or Partnership Relationship to any other Air Quality Permittee (List the names of any companies that have operating (20.2.70 NMAC) permits and with whom the applicant for this permit has a corporate or partnership relationship): N/A		
4	Name of Parent Company ("Parent Company" means the primary name of the organization that owns the company to be permitted wholly or in part.): N/A		
a	Address of Parent Company: N/A		
5	Names of Subsidiary Companies ("Subsidiary Companies" means organizations, branches, divisions or subsidiaries, which are owned, wholly or in part, by the company to be permitted.): N/A		
6	Telephone numbers & names of the owners' agents and site contacts familiar with plant operations: Darin Kennard – (346) 351-2790		
7	Affected Programs to include Other States, local air pollution control programs (i.e. Bernalillo) and Indian tribes: Will the property on which the facility is proposed to be constructed or operated be closer than 80 km (50 miles) from other states, local pollution control programs, and Indian tribes and pueblos (20.2.70.402.A.2 and 20.2.70.7.B)? If yes, state which ones and provide the distances in kilometers: N/A		

## Section 1-I – Submittal Requirements

Each 20.2.73 NMAC (NOI), a 20.2.70 NMAC (Title V), a 20.2.72 NMAC (NSR minor source), or 20.2.74 NMAC (PSD) application package shall consist of the following:

### Hard Copy Submittal Requirements:

- 1) One hard copy **original signed and notarized application package printed double sided ‘head-to-toe’ 2-hole punched** as we bind the document on top, not on the side; except Section 2 (landscape tables), which should be **head-to-head**. Please use **numbered tab separators** in the hard copy submittal(s) as this facilitates the review process. For NOI submittals only, hard copies of UA1, Tables 2A, 2D & 2F, Section 3 and the signed Certification Page are required. **Please include a copy of the check on a separate page.**
- 2) If the application is for a minor NSR, PSD, NNSR, or Title V application, include one working hard **copy** for Department use. This **copy** should be printed in book form, 3-hole punched, and **must be double sided**. Note that this is in addition to the head-to-toe 2-hole punched copy required in 1) above. Minor NSR Technical Permit revisions (20.2.72.219.B NMAC) only need to fill out Sections 1-A, 1-B, 3, and should fill out those portions of other Section(s) relevant to the technical permit revision. TV Minor Modifications need only fill out Sections 1-A, 1-B, 1-H, 3, and those portions of other Section(s) relevant to the minor modification. NMED may require additional portions of the application to be submitted, as needed.
- 3) The entire NOI or Permit application package, including the full modeling study, should be submitted electronically. Electronic files for applications for NOIs, any type of General Construction Permit (GCP), or technical revisions to NSRs must be submitted with compact disk (CD) or digital versatile disc (DVD). For these permit application submittals, **two CD** copies are required (in sleeves, not crystal cases, please), with additional CD copies as specified below. NOI applications require only a **single CD** submittal. Electronic files for other New Source Review (construction) permits/permit modifications or Title V permits/permit modifications can be submitted on CD/DVD or sent through AQB’s secure file transfer service.

### Electronic files sent by (check one):

☐ CD/DVD attached to paper application

☐ secure electronic transfer. Air Permit Contact Name \_\_\_\_\_

Email \_\_\_\_\_

Phone number \_\_\_\_\_

a. If the file transfer service is chosen by the applicant, after receipt of the application, the Bureau will email the applicant with instructions for submitting the electronic files through a secure file transfer service. Submission of the electronic files through the file transfer service needs to be completed within 3 business days after the invitation is received, so the applicant should ensure that the files are ready when sending the hard copy of the application. The applicant will not need a password to complete the transfer. **Do not use the file transfer service for NOIs, any type of GCP, or technical revisions to NSR permits.**

- 4) Optionally, the applicant may submit the files with the application on compact disk (CD) or digital versatile disc (DVD) following the instructions above and the instructions in 5 for applications subject to PSD review.
- 5) If **air dispersion modeling** is required by the application type, include the **NMED Modeling Waiver** and/or electronic air dispersion modeling report, input, and output files. The dispersion modeling **summary report only** should be submitted as hard copy(ies) unless otherwise indicated by the Bureau.
- 6) If the applicant submits the electronic files on CD and the application is subject to PSD review under 20.2.74 NMAC (PSD) or NNSR under 20.2.79 NMC include,
  - a. one additional CD copy for US EPA,
  - b. one additional CD copy for each federal land manager affected (NPS, USFS, FWS, USDI) and,
  - c. one additional CD copy for each affected regulatory agency other than the Air Quality Bureau.

If the application is submitted electronically through the secure file transfer service, these extra CDs do not need to be submitted.

### Electronic Submittal Requirements [in addition to the required hard copy(ies)]:

- 1) All required electronic documents shall be submitted as 2 separate CDs or submitted through the AQB secure file transfer service. Submit a single PDF document of the entire application as submitted and the individual documents comprising the application.
- 2) The documents should also be submitted in Microsoft Office compatible file format (Word, Excel, etc.) allowing us to access the text and formulas in the documents (copy & paste). Any documents that cannot be submitted in a Microsoft Office compatible

format shall be saved as a PDF file from within the electronic document that created the file. If you are unable to provide Microsoft office compatible electronic files or internally generated PDF files of files (items that were not created electronically: i.e. brochures, maps, graphics, etc.), submit these items in hard copy format. We must be able to review the formulas and inputs that calculated the emissions.

- 3) It is preferred that this application form be submitted as 4 electronic files (3 MSWord docs: Universal Application section 1 [UA1], Universal Application section 3-19 [UA3], and Universal Application 4, the modeling report [UA4]) and 1 Excel file of the tables (Universal Application section 2 [UA2]). Please include as many of the 3-19 Sections as practical in a single MS Word electronic document. Create separate electronic file(s) if a single file becomes too large or if portions must be saved in a file format other than MS Word.
- 4) The **electronic file names** shall be a maximum of 25 characters long (including spaces, if any). The format of the electronic Universal Application shall be in the format: "A-3423-FacilityName". The "A" distinguishes the file as an application submittal, as opposed to other documents the Department itself puts into the database. Thus, all electronic application submittals should begin with "A-". Modifications to existing facilities should use the **core permit number** (i.e. '3423') the Department assigned to the facility as the next 4 digits. Use 'XXXX' for new facility applications. The format of any separate electronic submittals (additional submittals such as non-Word attachments, re-submittals, application updates) and Section document shall be in the format: "A-3423-9-description", where "9" stands for the **section #** (in this case Section 9-Public Notice). Please refrain, as much as possible, from submitting any scanned documents as this file format is extremely large, which uses up too much storage capacity in our database. Please take the time to fill out the **header information** throughout all submittals as this will identify any loose pages, including the Application Date (date submitted) & Revision number (0 for original, 1, 2, etc.; which will help keep track of subsequent partial update(s) to the original submittal. Do not use special symbols (#, @, etc.) in file names. The footer information should not be modified by the applicant.

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**Table 2-A: Regulated Emission Sources**

Unit and stack numbering must correspond throughout the application package. If applying for a NOI under 20.2.73 NMAC, equipment exemptions under 2.72.202 NMAC do not apply.

Unit Number <sup>1</sup>	Source Description	Make	Model #	Serial #	Manufacturer's Rated Capacity <sup>3</sup> (Specify Units)	Requested Permitted Capacity <sup>3</sup> (Specify Units)	Date of Manufacture <sup>2</sup>	Controlled by Unit #	Source Classification Code (SCC)	For Each Piece of Equipment, Check One	RICE Ignition Type (CL, SI, 4SLB, 4SRB, 2SLB) <sup>4</sup>	Replacing Unit No.
							Date of Construction/Reconstruction <sup>2</sup>	Emissions vented to Stack #				
FL-1	Emergency Flare	John Zink	Unknown	63568	Unknown	Unknown	2005	N/A	31000205	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	
HOH	Hot Oil Heater	Entec	4V1-34-4HE-8-12-2HF	91674	15.5 MMBtu/hr	15.5 MMBtu/hr	<2000	N/A	31000404	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input checked="" type="checkbox"/> To be Replaced	N/A	
GDS-2	Glycol Dehydrator Still	Rama	Unknown	2138	40 MMSCFD	40 MMSCFD	5/21/1999		31000227	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input checked="" type="checkbox"/> To be Replaced	N/A	
AU-2	Amine Unit	Longview Machine Inc	TAG # C-0701 NB:91	238	40 MMSCFD	40 MMSCFD	1972		31000201	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	
GDS-1-Reg	Regenerator Gas TEG Dehydrator Still Vent/ Flash Tank	Unknown	Unknown	Unknown	Unknown	Unknown	5/21/1999		31000227	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input checked="" type="checkbox"/> To be Replaced	N/A	
RB-GDS-1-Reg	Regenerator Gas TEG Reboiler	Unknown	Unknown	Unknown	1.00 MMBtu/hr	1.00 MMBtu/hr			31000404	<input type="checkbox"/> Existing (unchanged) <input checked="" type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	
AU-1-Reg	Regenerator Gas Amine Unit	Parmac	Unknown	72-7590	30 MMSCFD	30 MMSCFD	1972		31000201	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input checked="" type="checkbox"/> To be Replaced	N/A	
RB-AU-1-Reg	Amine Reboiler	Parmac	Unknown	72-7591	3.5 MMBtu/Hr	3.5 MMBtu/Hr	1972		31000404	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input checked="" type="checkbox"/> To be Replaced	N/A	
MSD	Molecular Sieve Dehydration System	Unknown	Unknown	Unknown	6 MMSCFD	6 MMSCFD	Unknown		31000299	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	
FL-2	Process Flare	IT McGill	Tag #30-102-1	765-2	Unknown	Unknown	5/21/1999	-	31000205	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	
ENG-1	Compressor Engine	Caterpillar	G3606LE	TBD	1775 hp	1775 hp	TBD	CAT-1	20200254	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input checked="" type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	4SLB	
ENG-2	Compressor Engine	Caterpillar	G3606LE	TBD	1775 hp	1775 hp	TBD	CAT-2	20200254	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input checked="" type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	4SLB	
ENG-3	Compressor Engine	Caterpillar	G3606LE	TBD	1775 hp	1775 hp	TBD	CAT-3	20200254	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input checked="" type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	4SLB	
ENG-4	Compressor Engine	Caterpillar	G3606LE	TBD	1775 hp	1775 hp	TBD	CAT-4	20200254	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input checked="" type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	4SLB	
ENG-5	AGI Compressor Engine	AJAX	DPC-2804 LE	TBD	800 hp	800 hp	TBD	CAT-5	20200254	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input checked="" type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	2SLB	
ENG-6	AGI Compressor Engine	AJAX	DPC-2804 LE	TBD	800 hp	800 hp	TBD	CAT-6	20200254	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input checked="" type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	2SLB	
H-1	Amine Regen Heater	Parmac	Unknown	TBD	22.4 MMBtu/Hr	22.4 MMBtu/Hr	TBD	N/A	31000404	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	
H-2	TEG Regen Heater	ARC	Unknown	EC-0045-A-3	1.5 MMBtu/Hr	1.5 MMBtu/Hr	TBD	N/A	31000228	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	

Unit Number <sup>1</sup>	Source Description	Make	Model #	Serial #	Manufacturer's Rated Capacity <sup>3</sup> (Specify Units)	Requested Permitted Capacity <sup>3</sup> (Specify Units)	Date of Manufacture <sup>2</sup>	Controlled by Unit #	Source Classification Code (SCC)	For Each Piece of Equipment, Check One	RICE Ignition Type (CI, SI, 4SLB, 4SRB, 2SLB) <sup>4</sup>	Replacing Unit No.
							Date of Construction/Reconstruction <sup>2</sup>	Emissions vented to Stack #				
H-3	Molecular Sieve Regen Heater	TBD	TBD	TBD	3.18 MMBtu/Hr	3.18 MMBtu/Hr	TBD	N/A	31000229	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input checked="" type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	
H-4	Hot Oil Heater	Entec	4V1-34-4HE-8-12-2HF	91674	15.5 MMBtu/hr	15.5 MMBtu/hr	<2000	N/A	31000404	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input checked="" type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	HOH
H-5	Selexol Regenerator Heater	Parmac	Unknown	72-7591	3.5 MMBtu/Hr	3.5 MMBtu/Hr	1972	N/A	31000231	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input checked="" type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	RB-AU-1-REG
DEHY-1	TEG Dehydrator Still Vent	ARC	Unknown	TBD	90 MMscfd	90 MMscfd	TBD	BTEX	31000227	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input checked="" type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	
DEHY-2	TEG Dehydrator	Rama	Unknown	2138	40 MMscfd	40 MMscfd	5/21/1999	BTEX	31000227	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input checked="" type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	GDS-2 and GDS-1 - Reg
AU-1	Amine Unit	Parmac	Unknown	TBD	90 MMSCFD	90 MMSCFD	TBD	AGI well	31000201	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input checked="" type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	
AU-3	Selexol Amine Unit	Parmac	Unknown	72-7590	30 MMSCFD	30 MMSCFD	1972	AGI well	31000201	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input checked="" type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	AU-1-REG
FUG	Fugitive Emissions	N/A	N/A	N/A	N/A	N/A	N/A	N/A	31088811	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	
SSM	Startup/Shutdown/Maintenance	N/A	N/A	N/A	N/A	N/A	N/A	FL-1	N/A	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input checked="" type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	
Malf	Malfunction Emissions	N/A	N/A	N/A	N/A	N/A	N/A	FL-1	N/A	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input checked="" type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	

<sup>1</sup> Unit numbers must correspond to unit numbers in the previous permit unless a complete cross reference table of all units in both permits is provided.

<sup>2</sup> Specify dates required to determine regulatory applicability.

<sup>3</sup> To properly account for power conversion efficiencies, generator set rated capacity shall be reported as the rated capacity of the engine in horsepower, not the kilowatt capacity of the generator set.

<sup>4</sup> 4SLB means four stroke lean burn engine, 4SRB means four stroke rich burn engine, 2SLB means two stroke lean burn engine, CI means compression ignition, and SI means spark ignition

**Table 2-B: Insignificant Activities<sup>1</sup> (20.2.70 NMAC) OR Exempted Equipment (20.2.72 NMAC)**

All 20.2.70 NMAC (Title V) applications must list all Insignificant Activities in this table. All 20.2.72 NMAC applications must list Exempted Equipment in this table. If equipment listed on this table is exempt under 20.2.72.202.B.5, include emissions calculations and emissions totals for 20.2.B.5 "similar functions" units, operations, and activities in Section 6, Calculations. Equipment and activities exempted under 20.2.72.202 NMAC may not necessarily be Insignificant under 20.2.70 NMAC (and vice versa). Unit & stack numbering must be consistent throughout the application package. Per Exemptions Policy 02-012.00 (see [http://www.env.nm.gov/aqb/permit/aqb\\_pol.html](http://www.env.nm.gov/aqb/permit/aqb_pol.html)), 20.2.72.202.B NMAC Exemptions do not apply, but 20.2.72.202.A NMAC exemptions do apply to NOI facilities under 20.2.73 NMAC. List 20.2.72.301.D.4 NMAC Auxiliary Equipment for Streamline applications in Table 2-A. The List of Insignificant Activities (for TV) can be found online at <https://www.env.nm.gov/wp-content/uploads/sites/2/2017/10/InsignificantListTitleV.pdf>. TV sources may elect to enter both TV Insignificant Activities and Part 72 Exemptions on this form.

Unit Number	Source Description	Manufacturer	Model No.	Max Capacity	List Specific 20.2.72.202 NMAC Exemption (e.g. 20.2.72.202.B.5)	Date of Manufacture /Reconstruction <sup>2</sup>	For Each Piece of Equipment, Check One	
			Serial No.	Capacity Units	Insignificant Activity citation (e.g. IA List Item #1.a)	Date of Installation /Construction <sup>2</sup>		
TK-1 through TK-15	Storage Tanks		Unknown	Multiple	20.2.72.202.B.2.A	Unknown	<input type="checkbox"/> Existing (unchanged)	<input checked="" type="checkbox"/> To be Removed
			Multiple		N/A	Unknown	<input type="checkbox"/> New/Additional	<input type="checkbox"/> Replacement Unit
TK-1	Amine		TBD	150	20.2.72.202.B.5	TBD	<input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Replaced
			5819 & 5820	bbl	N/A	3/1/2021	<input checked="" type="checkbox"/> Existing (unchanged)	<input type="checkbox"/> To be Removed
TK-2	TEG		N/A	23.8	20.2.72.202.B.5	TBD	<input type="checkbox"/> New/Additional	<input type="checkbox"/> Replacement Unit
			N/A	bbl	N/A	3/1/2021	<input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Replaced
TK-3	Lube Oil		N/A	75	20.2.72.202.B.5	N/A	<input checked="" type="checkbox"/> Existing (unchanged)	<input type="checkbox"/> To be Removed
			N/A	bbl	N/A	N/A	<input type="checkbox"/> New/Additional	<input type="checkbox"/> Replacement Unit
TK-4	Waste Water		N/A	100	20.2.72.202.B.5	N/A	<input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Replaced
			N/A	bbl	N/A	N/A	<input checked="" type="checkbox"/> Existing (unchanged)	<input type="checkbox"/> To be Removed
TK-5	Lube Oil		N/A	11.8	20.2.72.202.B.5		<input type="checkbox"/> New/Additional	<input type="checkbox"/> Replacement Unit
			N/A	bbl	N/A		<input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Replaced
TK-6	Methanol		N/A	23.8	20.2.72.202.B.5		<input checked="" type="checkbox"/> Existing (unchanged)	<input type="checkbox"/> To be Removed
			N/A	bbl	N/A		<input type="checkbox"/> New/Additional	<input type="checkbox"/> Replacement Unit
TK-7	Methanol		N/A	17.9	20.2.72.202.B.5		<input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Replaced
			N/A	bbl	N/A		<input checked="" type="checkbox"/> Existing (unchanged)	<input type="checkbox"/> To be Removed
TK-8	Lube Oil		N/A	11.8	20.2.72.202.B.5		<input type="checkbox"/> New/Additional	<input type="checkbox"/> Replacement Unit
			N/A	bbl	N/A		<input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Replaced
TK-9	AGR Waste Water		N/A	210	20.2.72.202.B.5		<input checked="" type="checkbox"/> Existing (unchanged)	<input type="checkbox"/> To be Removed
			N/A	bbl	N/A		<input type="checkbox"/> New/Additional	<input type="checkbox"/> Replacement Unit
TK-10	RO Water		N/A	400	20.2.72.202.B.6		<input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Replaced
			N/A	bbl	N/A		<input checked="" type="checkbox"/> Existing (unchanged)	<input type="checkbox"/> To be Removed
TK-11 through TK-13	RO Water		N/A	210	20.2.72.202.B.5		<input type="checkbox"/> New/Additional	<input type="checkbox"/> Replacement Unit
			N/A	bbl	N/A		<input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Replaced
TK-14	RO Water		N/A	120	20.2.72.202.B.6		<input checked="" type="checkbox"/> Existing (unchanged)	<input type="checkbox"/> To be Removed
			N/A	bbl	N/A		<input type="checkbox"/> New/Additional	<input type="checkbox"/> Replacement Unit
TK-15	AGR Solvent		N/A	90	20.2.72.202.B.5		<input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Replaced
			N/A	bbl	N/A		<input checked="" type="checkbox"/> Existing (unchanged)	<input type="checkbox"/> To be Removed

<sup>2</sup> Specify date(s) required to determine regulatory applicability.



Unit and stack numbering must correspond throughout the application package. Only list control equipment for TAPs if the TAP's maximum uncontrolled emissions rate is over its respective threshold as listed in 20.2.72 NMAC, Subpart V, Tables A and B. In accordance with 20.2.72.203.A(3) and (8) NMAC, 20.2.70.300.D(5)(b) and (e) NMAC, and 20.2.73.200.B(7) NMAC, the permittee shall report all control devices and list each pollutant controlled by the control device regardless if the applicant takes credit for the reduction in emissions.

<sup>1</sup> List each control device on a separate line. For each control device, list all emission units controlled by the control device.

☐ This Table was intentionally left blank because it would be identical to Table 2-E.

Unit No.	NOx		CO		VOC		SOx		PM <sup>1</sup>		PM10 <sup>1</sup>		PM2.5 <sup>1</sup>		H <sub>2</sub> S		Lead	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
ENG-1	1.96	8.57	10.76	47.13	2.47	10.80	0.0056	0.024	0.12	0.52	0.12	0.52	0.12	0.52	-	-	-	-
ENG-2	1.96	8.57	10.76	47.13	2.47	10.80	0.0056	0.024	0.12	0.52	0.12	0.52	0.12	0.52	-	-	-	-
ENG-3	1.96	8.57	10.76	47.13	2.47	10.80	0.0056	0.024	0.12	0.52	0.12	0.52	0.12	0.52	-	-	-	-
ENG-4	1.96	8.57	10.76	47.13	2.47	10.80	0.0056	0.024	0.12	0.52	0.12	0.52	0.12	0.52	-	-	-	-
ENG-5	3.53	15.45	2.12	9.27	0.88	3.86	0.0029	0.013	0.44	1.93	0.44	1.93	0.44	1.93	-	-	-	-
ENG-6	3.53	15.45	2.12	9.27	0.88	3.86	0.0029	0.013	0.44	1.93	0.44	1.93	0.44	1.93	-	-	-	-
H-1	2.20	9.62	1.84	8.08	0.12	0.53	0.11	0.46	0.17	0.73	0.17	0.73	0.17	0.73	-	-	-	-
H-2	0.15	0.64	0.12	0.54	0.0081	0.035	0.0071	0.031	0.011	0.049	0.011	0.049	0.011	0.049	-	-	-	-
H-3	0.31	1.37	0.26	1.15	0.017	0.075	0.015	0.066	0.024	0.104	0.024	0.10	0.024	0.10	-	-	-	-
H-4	1.52	6.66	1.28	5.59	0.084	0.37	0.073	0.32	0.12	0.51	0.12	0.51	0.12	0.51	-	-	-	-
H-5	0.34	1.50	0.29	1.26	0.019	0.083	0.017	0.072	0.026	0.11	0.026	0.11	0.026	0.11	-	-	-	-
DEHY-1	-	-	-	-	65.12	285.23	-	-	-	-	-	-	-	-	0.0065	0.028	-	-
DEHY-2	-	-	-	-	377.416	1653.08	-	-	-	-	-	-	-	-	3662.97	16043.80	-	-
AU-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AU-2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AU-3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FL-1	0.058	0.25	0.26	1.15	-	-	0.0040	0.018	-	-	-	-	-	-	-	-	-	-
FL-2	0.016	0.072	0.075	0.33	-	-	0.0040	0.018	-	-	-	-	-	-	-	-	-	-
FUG	-	-	-	-	4.62	20.23	-	-	-	-	-	-	-	-	-	-	-	-
SSM	-	-	-	-	*	10.00	-	-	-	-	-	-	-	-	-	-	-	-
MALF	-	-	-	-	*	10.00	-	-	-	-	-	-	-	-	-	-	-	-
Totals	19.47	85.29	51.41	225.18	459.03	2030.55	0.25	1.11	1.70	7.46	1.70	7.46	1.70	7.46	3662.97	16043.83		

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**Table 2-E: Requested Allowable Emissions**

Unit & stack numbering must be consistent throughout the application package. Fill all cells in this table with the emission numbers or a "-" symbol. A "--" symbol indicates that emissions of this pollutant are not expected. Numbers shall be expressed to at least 2 decimal points (e.g. 0.41, 1.41, or 1.41E<sup>-4</sup>).

Unit No.	NOx		CO		VOC		SOx		PM <sup>1</sup>		PM10 <sup>1</sup>		PM2.5 <sup>1</sup>		H <sub>2</sub> S		Lead	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
ENG-1	2.15	9.43	3.23	14.14	0.91	3.97	0.0056	0.024	0.12	0.52	0.12	0.52	0.12	0.52	-	-	-	-
ENG-2	2.15	9.43	3.23	14.14	0.91	3.97	0.0056	0.024	0.12	0.52	0.12	0.52	0.12	0.52	-	-	-	-
ENG-3	2.15	9.43	3.23	14.14	0.91	3.97	0.0056	0.024	0.12	0.52	0.12	0.52	0.12	0.52	-	-	-	-
ENG-4	2.15	9.43	3.23	14.14	0.91	3.97	0.0056	0.024	0.12	0.52	0.12	0.52	0.12	0.52	-	-	-	-
ENG-5	3.53	15.45	1.06	4.64	1.44	6.32	0.0029	0.013	0.44	1.93	0.44	1.93	0.44	1.93	-	-	-	-
ENG-6	3.53	15.45	1.06	4.64	1.44	6.32	0.0029	0.013	0.44	1.93	0.44	1.93	0.44	1.93	-	-	-	-
H-1	2.20	9.62	1.84	8.08	0.12	0.53	0.11	0.46	0.17	0.73	0.17	0.73	0.17	0.73	-	-	-	-
H-2	0.15	0.64	0.12	0.54	0.0081	0.035	0.0071	0.031	0.011	0.049	0.011	0.049	0.011	0.049	-	-	-	-
H-3	0.31	1.37	0.26	1.15	0.017	0.075	0.015	0.066	0.024	0.10	0.024	0.10	0.024	0.10	-	-	-	-
H-4	1.52	6.66	1.28	5.59	0.084	0.37	0.073	0.32	0.12	0.51	0.12	0.51	0.12	0.51	-	-	-	-
H-5	0.34	1.50	0.29	1.26	0.019	0.083	0.017	0.072	0.026	0.11	0.026	0.11	0.026	0.11	-	-	-	-
DEHY-1	-	-	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-
DEHY-2															-	-	-	-
AU-1	-	-	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-
AU-2															-	-	-	-
AU-3															-	-	-	-
FL-1	0.06	0.25	0.26	1.15	-	`	0.0040	0.018	-	-	-	-	-	-	-	-	-	-
FL-2	0.18	0.77	0.80	3.52	1.30	5.70	0.0040	0.018	-	-	-	-	-	-	-	-	-	-
FUG	-	-	-	-	4.62	20.23	-	-	-	-	-	-	-	-	-	-	-	-
Totals	20.42	89.42	19.89	87.13	12.68	55.55	0.25	1.11	1.70	7.46	1.70	7.46	1.70	7.46	-	-	-	-

**Condensable Particulate Matter:** Include condensable particulate matter emissions for PM10 and PM2.5 if the source is a combustion source. Do not include condensable particulate matter for PM unless PM is set equal to PM10 and PM2.5. Particulate matter (PM) is not subject to an ambient air quality standard, but it is a regulated air pollutant under PSD (20.2.74 NMAC) and Title V (20.2.70 NMAC).

All applications for facilities that have emissions during routine or predictable startup, shutdown or scheduled maintenance (SSM)<sup>1</sup>, including NOI applications, must include in this table the Maximum Emissions during routine or predictable startup, shutdown and scheduled maintenance (20.2.7 NMAC, 20.2.72.203.A.3 NMAC, 20.2.73.200.D.2 NMAC). In Section 6 and 6a, provide emissions calculations for all SSM emissions reported in this table. Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications ([https://www.env.nm.gov/aqb/permit/aqb\\_pol.html](https://www.env.nm.gov/aqb/permit/aqb_pol.html)) for more detailed instructions. Numbers shall be expressed to at least 2 decimal points (e.g. 0.41, 1.41, or 1.41E-4).

<sup>2</sup> **Condensable Particulate Matter:** Include condensable particulate matter emissions for PM10 and PM2.5 if the source is a combustion source. Do not include condensable particulate matter for PM unless PM is set equal to PM10 and PM2.5. Particulate matter (PM) is not subject to an ambient air quality standard, but it is a regulated air pollutant under PSD (20.2.74 NMAC) and Title V (20.2.70 NMAC).

**Table 2-G: Stack Exit and Fugitive Emission Rates for Special Stacks**

☒ I have elected to leave this table blank because this facility does not have any stacks/vents that split emissions from a single source or combine emissions from more than one source listed in table 2-A. Additionally, the emission rates of all stacks match the Requested allowable emission rates stated in Table 2-E.

Use this table to list stack emissions (requested allowable) from split and combined stacks. List Toxic Air Pollutants (TAPs) and Hazardous Air Pollutants (HAPs) in Table 2-I. List all fugitives that are associated with the normal, routine, and non-emergency operation of the facility. Unit and stack numbering must correspond throughout the application package. Refer to Table 2-E for instructions on use of the “-” symbol and on significant figures.

[illegible]

Unit and stack numbering must correspond throughout the application package. Include the stack exit conditions for each unit that emits from a stack, including blowdown venting parameters and tank emissions. If the facility has multiple operating scenarios, complete a separate Table 2-H for each scenario and, for each, type scenario name here:

**Table 2-I: Stack Exit and Fugitive Emission Rates for HAPs and TAPs**

In the table below, report the Potential to Emit for each HAP from each regulated emission unit listed in Table 2-A, only if the entire facility emits the HAP at a rate greater than or equal to one (1) ton per year. For each such emission unit, HAPs shall be reported to the nearest 0.1 tpy. Each facility-wide Individual HAP total and the facility-wide Total HAPs shall be the sum of all HAP sources calculated to the nearest 0.1 ton per year. Per 20.2.72.403.A.1 NMAC, facilities not exempt [see 20.2.72.402.C NMAC] from TAP permitting shall report each TAP that has an uncontrolled emission rate in excess of its pounds per hour screening level specified in 20.2.72.502 NMAC. TAPs shall be reported using one more significant figure than the number of significant figures shown in the pound per hour threshold corresponding to the substance. Use the HAP nomenclature as it appears in Section 112 (b) of the 1990 CAAA and the TAP nomenclature as it listed in 20.2.72.502 NMAC. Include tank-flashing emissions estimates of HAPs in this table. For each HAP or TAP listed, fill all cells in this table with the emission numbers or a "-" symbol. A "-" symbol indicates that emissions of this pollutant are not expected or the pollutant is emitted in a quantity less than the threshold amounts described above.

[illegible]



**Table 2-J: Fuel**

Specify fuel characteristics and usage. Unit and stack numbering must correspond throughout the application package.

Unit No.	Fuel Type (low sulfur Diesel, ultra low sulfur diesel, Natural Gas, Coal, ...)	Fuel Source: purchased commercial, pipeline quality natural gas, residue gas, raw/field natural gas, process gas (e.g. SRU tail gas) or other	Specify Units				
			Lower Heating Value	Hourly Usage	Annual Usage	% Sulfur	% Ash
ENG-1	Natural Gas	Pipeline Quality Natural Gas	1209.58	0.010	85.22	-	N/A
ENG-2	Natural Gas	Pipeline Quality Natural Gas	1209.58	0.010	85.22	-	N/A
ENG-3	Natural Gas	Pipeline Quality Natural Gas	1209.58	0.010	85.22	-	N/A
ENG-4	Natural Gas	Pipeline Quality Natural Gas	1209.58	0.010	85.22	-	N/A
ENG-5	Natural Gas	Pipeline Quality Natural Gas	1209.58	0.0052	45.19	-	N/A
ENG-6	Natural Gas	Pipeline Quality Natural Gas	1209.58	0.0052	45.19	-	N/A
H-1	Natural Gas	Pipeline Quality Natural Gas	1209.58	0.019	162.22	-	N/A
H-2	Natural Gas	Pipeline Quality Natural Gas	1209.58	0.0012	10.86	-	N/A
H-3	Natural Gas	Pipeline Quality Natural Gas	1209.58	0.0026	23.03	-	N/A
H-4	Natural Gas	Pipeline Quality Natural Gas	1209.58	0.013	112.25	-	N/A
H-5	Natural Gas	Pipeline Quality Natural Gas	1209.58	0.0029	25.35	-	N/A
FL-1	Natural Gas (pilot & Purge Gas)	Pipeline Quality Natural Gas	1209.58	0.0002	6.13	-	N/A
FL-2	Natural Gas (pilot & Purge Gas)	Pipeline Quality Natural Gas	1209.58	0.0002	6.13	-	N/A

For each tank, list the liquid(s) to be stored in each tank. If it is expected that a tank may store a variety of hydrocarbon liquids, enter "mixed hydrocarbons" in the Composition column for that tank and enter the corresponding data of the most volatile liquid to be stored in the tank. If tank is to be used for storage of different materials, list all the materials in the "All Calculations" attachment, run the newest version of TANKS on each, and use the material with the highest emission rate to determine maximum uncontrolled and requested allowable emissions rate. The permit will specify the most volatile category of liquids that may be stored in each tank. Include appropriate tank-flashing modeling input data. Use additional sheets if necessary. Unit and stack numbering must correspond throughout the application package.

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Roof Type	Seal Type, Welded Tank Seal Type		Seal Type, Riveted Tank Seal Type		Roof, Shell Color	Paint Condition
FX: Fixed Roof	Mechanical Shoe Seal	Liquid-mounted resilient seal	Vapor-mounted resilient seal	Seal Type	WH: White	Good
IF: Internal Floating Roof	A: Primary only	A: Primary only	A: Primary only	A: Mechanical shoe, primary only	AS: Aluminum (specular)	Poor
EF: External Floating Roof	B: Shoe-mounted secondary	B: Weather shield	B: Weather shield	B: Shoe-mounted secondary	AD: Aluminum (diffuse)	
P: Pressure	C: Rim-mounted secondary	C: Rim-mounted secondary	C: Rim-mounted secondary	C: Rim-mounted secondary	LG: Light Gray	
Note: 1.00 bbl = 0.159 M <sup>3</sup> = 42.0 gal					MG: Medium Gray	
					BL: Black	
					OT: Other (specify)	

Note:  $1.00 \text{ bbl} = 0.159 \text{ M}^3 = 42.0 \text{ gal}$

[illegible]





**Table 2-P: Greenhouse Gas Emissions**

Applications submitted under 20.2.70, 20.2.72, & 20.2.74 NMAC are required to complete this Table. Power plants, Title V major sources, and PSD major sources must report and calculate all GHG emissions for each unit. Applicants must report potential emission rates in short tons per year (see Section 6.a for assistance). Include GHG emissions during Startup, Shutdown, and Scheduled Maintenance in this table. For minor source facilities that are not power plants, are not Title V, or are not PSD, there are three options for reporting GHGs 1) report GHGs for each individual piece of equipment; 2) report all GHGs from a group of unit types, for example report all combustion source GHGs as a single unit and all venting GHG as a second separate unit; OR 3) check the following box ☐ By checking this box, the applicant acknowledges the total CO<sub>2</sub>e emissions are less than 75,000 tons per year.

		CO <sub>2</sub> ton/yr	N <sub>2</sub> O ton/yr	CH <sub>4</sub> ton/yr	SF <sub>6</sub> ton/yr	PFC/HFC ton/yr <sup>2</sup>									Total GHG Mass Basis ton/yr <sup>4</sup>	Total CO <sub>2</sub> e ton/yr <sup>5</sup>
Unit No.	GWPs <sup>1</sup>	1	298	25	22,800	footnote 3										
ENG-1	mass GHG	5469.12	0.010	0.10	-										5469.24	
	CO <sub>2</sub> e	5469.12	3.07	2.58	-											5474.77
ENG-2	mass GHG	5469.12	0.010	0.10	-										5469.24	
	CO <sub>2</sub> e	5469.12	3.07	2.58	-											5474.77
ENG-3	mass GHG	5469.12	0.010	0.10	-										5469.24	
	CO <sub>2</sub> e	5469.12	3.07	2.58	-											5474.77
ENG-4	mass GHG	5469.12	0.010	0.10	-										5469.24	
	CO <sub>2</sub> e	5469.12	3.07	2.58	-											5474.77
ENG-5	mass GHG	2,900.39	0.055	0.0055	-										2900.45	
	CO <sub>2</sub> e	2,900.39	16.29	0.14	-											2916.81
ENG-6	mass GHG	2,900.39	0.055	0.0055	-										2900.45	
	CO <sub>2</sub> e	2900.39	16.29	0.14	-											2916.81
H-1	mass GHG	1.19	2.24E-06	2.24E-05	-										1.19	
	CO <sub>2</sub> e	1.19	6.68E-04	5.60E-04	-											1.19
H-2	mass GHG	0.080	1.50E-07	1.50E-06	-										0.080	
	CO <sub>2</sub> e	0.080	4.47E-05	3.75E-05	-											0.080
H-3	mass GHG	0.17	3.18E-07	3.18E-06	-										0.17	
	CO <sub>2</sub> e	0.17	9.48E-05	7.95E-05	-											0.17
H-4	mass GHG	0.82	1.55E-06	1.55E-05	-										0.82	
	CO <sub>2</sub> e	0.82	4.62E-04	3.88E-04	-											0.82
H-5	mass GHG	0.19	3.50E-07	3.50E-07	-										0.19	
	CO <sub>2</sub> e	0.19	1.04E-04	8.75E-06	-											0.19
FL-1	mass GHG	393.55	7.42E-04	7.42E-03	-										393.56	
	CO <sub>2</sub> e	393.55	0.22	0.19	-											393.96
FL-2	mass GHG	1677.72	2.42E-08	2.42E-08	-										1677.72	
	CO <sub>2</sub> e	1677.72	7.21E-06	6.05E-07	-											1677.72
DEHY-1	mass GHG	0.00E+00	-	0.00E+00	-										0.00	
DEHY-2	CO <sub>2</sub> e	0.00E+00	-	0.00E+00	-											0.00
AU-1	mass GHG	0.00E+00	-	0.00E+00	-										0.00	
AU-2																
AU-3	CO <sub>2</sub> e	0.00E+00	-	0.00E+00	-											0.00
	mass GHG															
	CO <sub>2</sub> e															
Total	mass GHG	29750.99	0.15	0.43	-										29751.57	
	CO <sub>2</sub> e	29750.99	45.09	10.77	-											29806.84

<sup>1</sup> GWP (Global Warming Potential): Applicants must use the most current GWPs codified in Table A-1 of 40 CFR part 98. GWPs are subject to change, therefore, applicants need to check 40 CFR 98 to confirm GWP values.

<sup>2</sup> For HFCs or PFCs describe the specific HFC or PFC compound and use a separate column for each individual compound.

<sup>3</sup> For each new compound, enter the appropriate GWP for each HFC or PFC compound from Table A-1 in 40 CFR 98.

<sup>4</sup> Green house gas emissions on a mass basis is the ton per year green house gas emission before adjustment with its GWP.

<sup>5</sup> CO<sub>2</sub>e means Carbon Dioxide Equivalent and is calculated by multiplying the TPY mass emissions of the green house gas by its GWP.



# Section 3

## Application Summary

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The **Application Summary** shall include a brief description of the facility and its process, the type of permit application, the applicable regulation (i.e. 20.2.72.200.A.X, or 20.2.73 NMAC) under which the application is being submitted, and any air quality permit numbers associated with this site. If this facility is to be collocated with another facility, provide details of the other facility including permit number(s). In case of a revision or modification to a facility, provide the lowest level regulatory citation (i.e. 20.2.72.219.B.1.d NMAC) under which the revision or modification is being requested. Also describe the proposed changes from the original permit, how the proposed modification will affect the facility's operations and emissions, de-bottlenecking impacts, and changes to the facility's major/minor status (both PSD & Title V).

The **Process Summary** shall include a brief description of the facility and its processes.

**Startup, Shutdown, and Maintenance (SSM) routine or predictable emissions:** Provide an overview of how SSM emissions are accounted for in this application. Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications ([http://www.env.nm.gov/aqb/permit/app\\_form.html](http://www.env.nm.gov/aqb/permit/app_form.html)) for more detailed instructions on SSM emissions.

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The Dagger Draw Gas Plant is currently permitted under NSR-0001-M7R2 and Title V Permit No. P-157-R3.

Frontier Field Services, LLC is submitting a significant revision application pursuant to 20.2.72.219.D.1.a for the existing Dagger Draw Gas Plant facility. The facility's total capacity will be increased to 90 MMSCFD of natural gas, which will be treated to remove H<sub>2</sub>S and CO<sub>2</sub> and then produces natural gas liquids from collected hydrocarbons. The proposed operational capacity of 90 MMSCFD will be both the maximum rated capacity and the requested permitted capacity for the facility. Initially the facility will operate the existing TEG dehydration equipment, unit DEHY-2, and the amine units, AU-2 and AU-3. These units will eventually be replaced with the larger TEG dehydration, unit DEHY-1, and the larger amine unit, AU-1. However the existing and the new equipment shall never run at the same time and the facility wide throughput will never exceed the requested allowable limit of 90 MMSCFD. The Molecular Sieve Device and the Cryo units for this facility are not a source of regulated emissions but are accounted for under the fugitive emissions for this facility. The gas plant is located approximately 9.2 miles southwest of Artesia in Eddy County, New Mexico.

**The currently permitted equipment listed below will be modified or updated from the NSR 0001-M7R2 and TV P157-R3:**

- Hot Oil Heater rated at 15.5 MMBtu/hr, unit HOH, is to be updated to Unit H-4
- TEG Dehydrator Flash Tank, unit GDS-2, is to be updated to Unit DEHY-2
- Amine Unit, unit AU-2, is to remain at facility
- Regenerator Gas Amine Unit, unit AU-1-Reg will be updated to unit AU-3
- Acid gas injection system is remain active for the facility but will only be considered a control
- Fugitive emissions (unit FUG) will be updated based on new component counts for facility
- Regenerator Gas TEG Dehydrator Still Vent, unit GDS-1-REG, is to be updated to DEHY-2
- Regenerator Gas TEG Reboiler, unit RB-GDS-1-Reg, is to be updated to unit H-2 as well an increase from 1.0 MMBtu/hr to 1.5 MMBtu/hr

**The proposed equipment to be included in this facility's permit are:**

- Four (4) Caterpillar G3606LE compressor engines rated at 1775 hp (Units ENG-1 through ENG-4)
- Two (2) Ajax DPC 2804LE compressor engines rated at 800 hp (Units ENG-5 & ENG-6)
- One (1) Amine Regenerator heater rated at 22.4 MMBtu/hr (Unit H-1)
- One (1) TEG Regenerator heater rated at 1.5 MMBtu/hr (Unit H-2)
- One (1) Molecular Sieve Regen heater rated at 3.18 MMBtu/hr (Unit H-3)
- One (1) Hot oil heater rated at 15.5 MMBtu/hr (Unit H-4)
- One (1) Selexol Regenerator heater rated at 3.5 MMBtu/hr (Unit H-5)
- One (1) Glycol Dehydrator rated at 90 MMSCFD (Unit DEHY-1)
- One (1) Amine Unit rated at 90 MMSCFD (Unit AU-1)

- One (1) Amine Unit rated at 40 MMSCFD (Unit AU-2)
- One (1) Emergency Flare (Unit FL-1)
- One (1) Process Flare (Unit FL-2)
- Fugitive, SSM, and Malfunction emissions

Below are the currently permitted sources that will be modified to represent current facility equipment with the updated source list:

Currently Permitted Sources	Description of Modification	New Permitted Listing	New Source Description
GDS-2	Currently representing the emissions of the DEHY Still vent. This will be combined under the new unit DEHY-2 at the current permitted capacity of 40 MMSCFD.	DEHY-2	TEG Dehydrator
GDS-1-REG	Currently representing the emissions of the DEHY regenerator. This will be combined under the new unit DEHY-2 at the current permitted capacity of 40 MMSCFD.	DEHY-2	
AU-1-REG	Currently representing the selexol amine unit on site. This will be left on site to and be renamed to AU-3 with a capacity of 30 MMSCFD.	AU-3	Selexol Amine Unit

# Section 4

## Process Flow Sheet

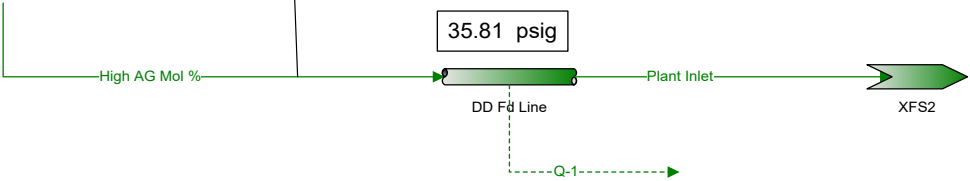
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A **process flow sheet** and/or block diagram indicating the individual equipment, all emission points and types of control applied to those points. The unit numbering system should be consistent throughout this application.

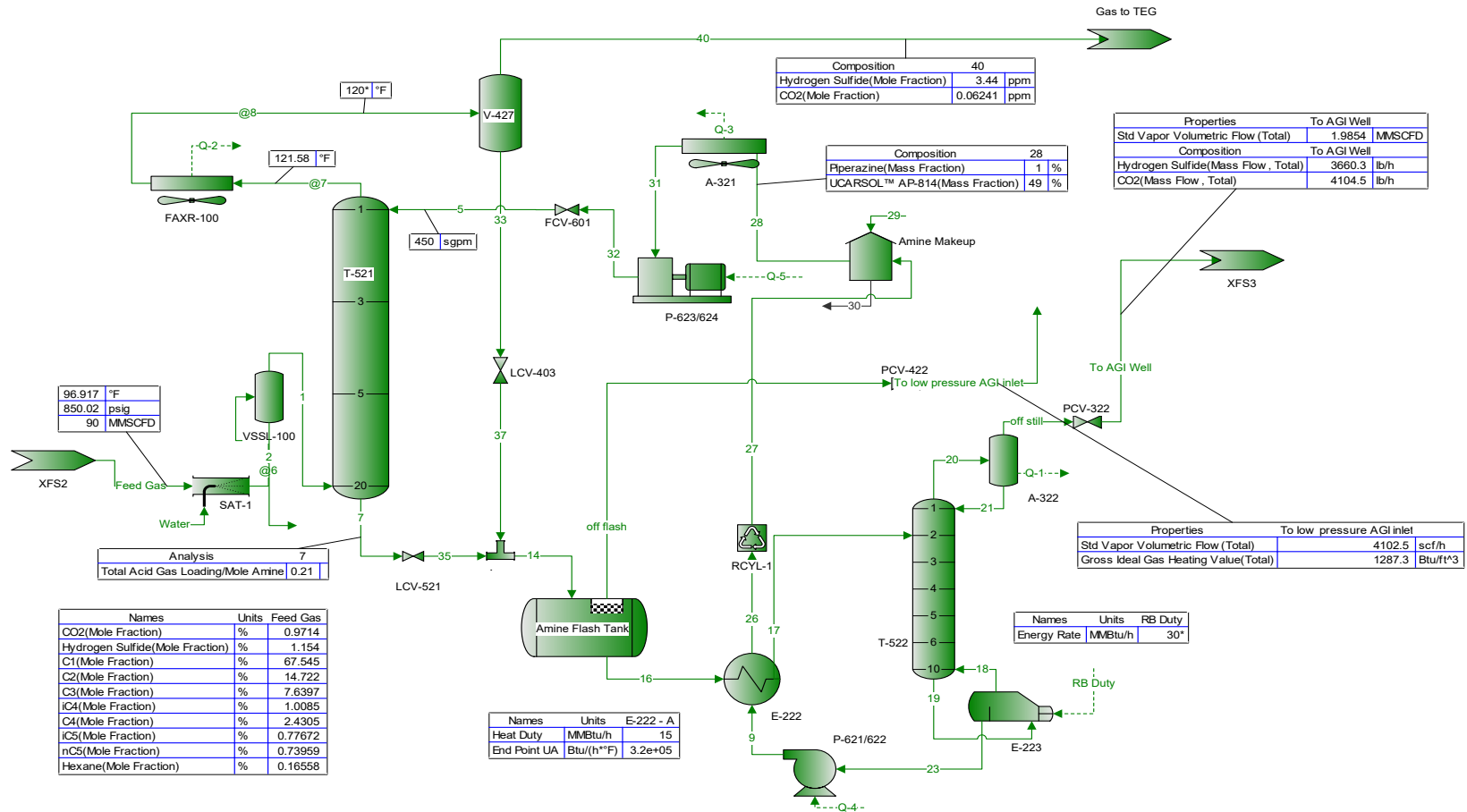
---

A process flow diagram is attached.

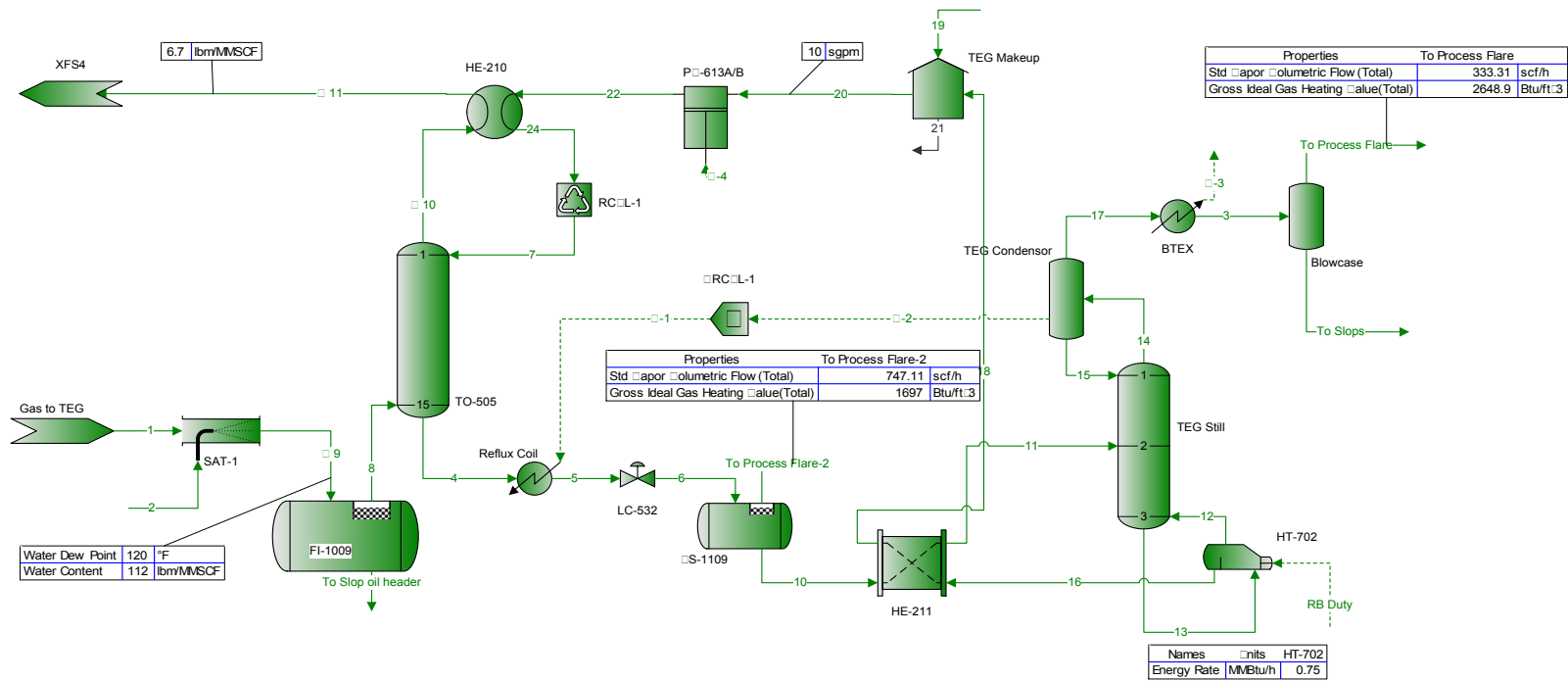
Properties		High AG Mol %
Std Vapor Volumetric Flow (Total)	90*	MMSCFD
Composition		High AG Mol %
Hydrogen Sulfide(Mole Fraction, Total)	1.154*	%



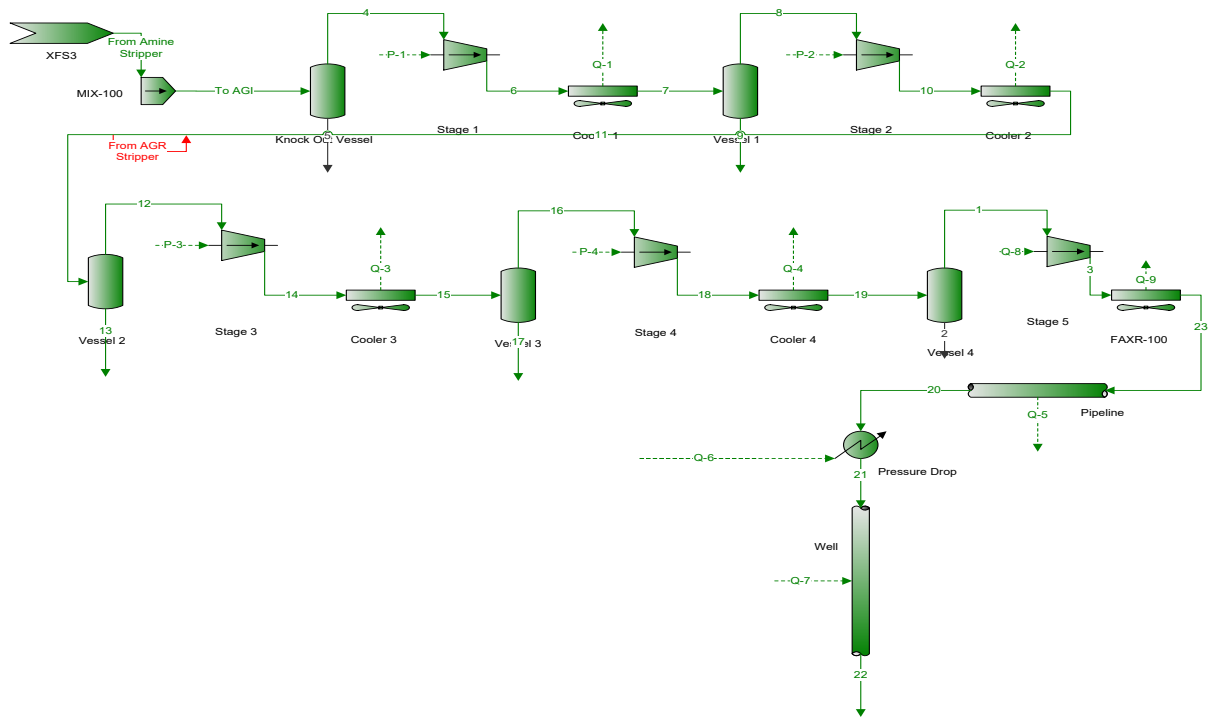
# Amine Treating System



## TEG Glycol Dehydration System

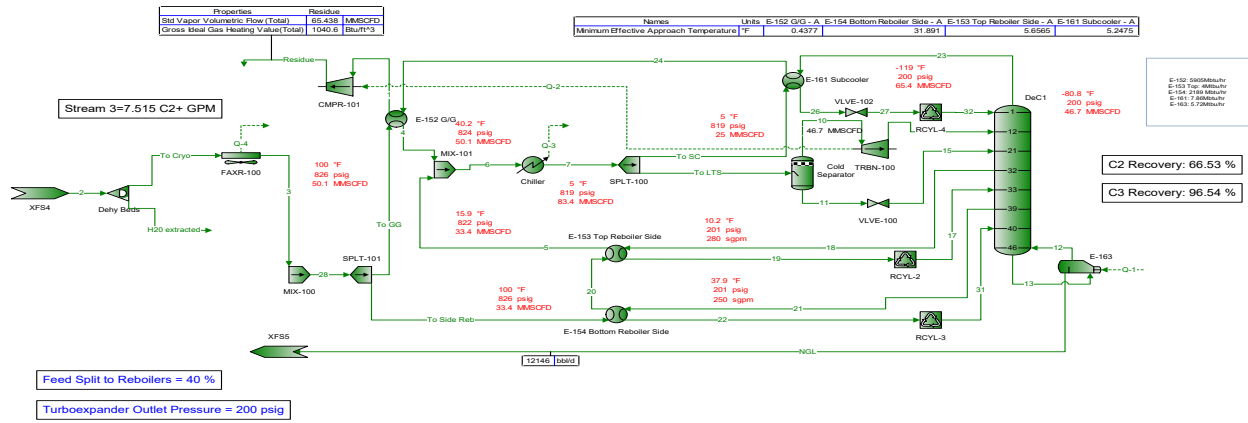


**Acid Gas Injection**  
 adapted from Carroll and Maddocks,  
 Laurance Reid Gas Conditioning Conference, 1999 pp. 90-116

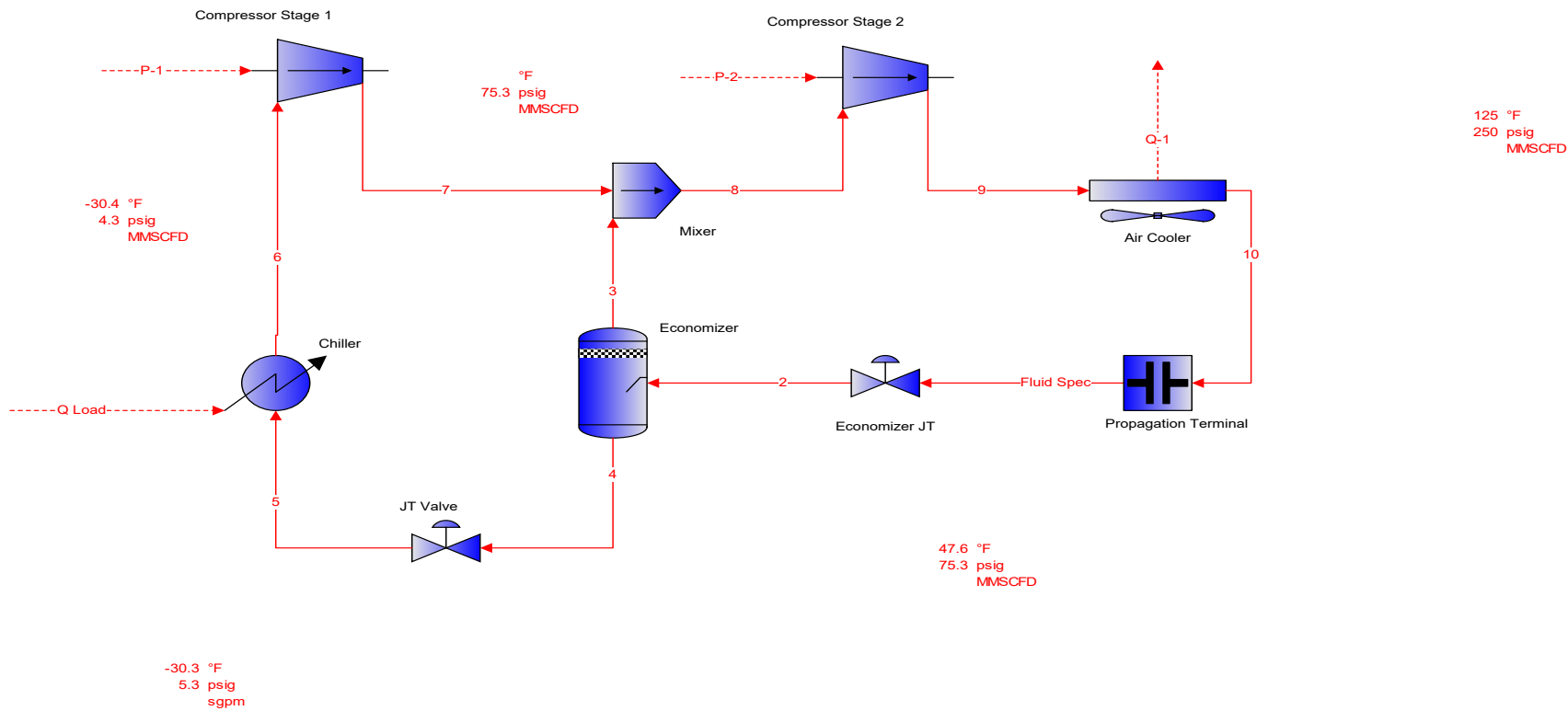




# Dagger Draw Expander



Propane Refrigeration Loop with Economizer



# Section 5

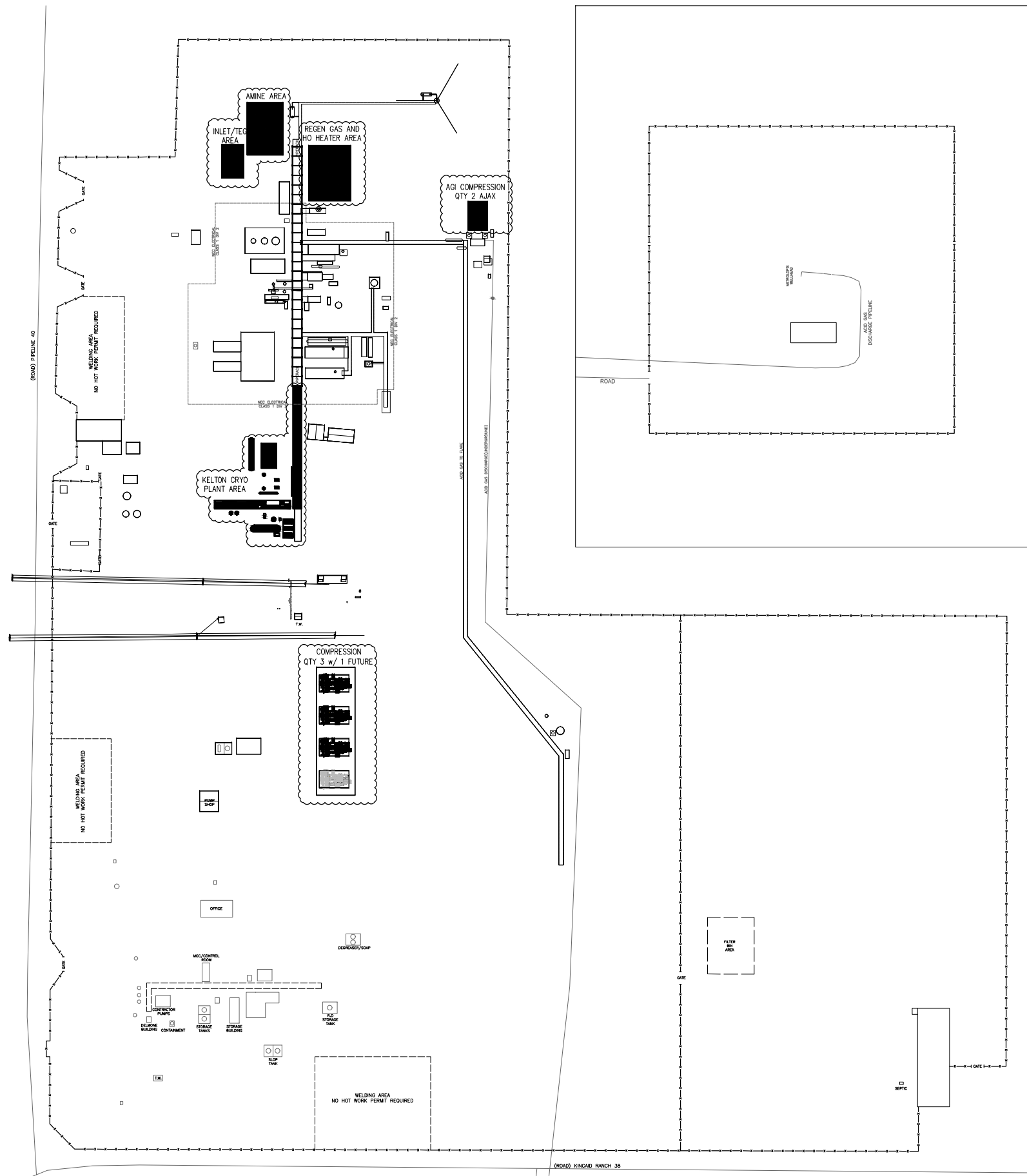
## Plot Plan Drawn To Scale

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A **plot plan drawn to scale** showing emissions points, roads, structures, tanks, and fences of property owned, leased, or under direct control of the applicant. This plot plan must clearly designate the restricted area as defined in UA1, Section 1-D.12. The unit numbering system should be consistent throughout this application.

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A plot plan is attached.



**DURANGO**  
MIDSTREAM  
DAGGER DRAW GAS PLANT



# PLOT PLAN ADDITIONS TO FACILITY

COUNTY: EDDY COUNTY	DRAWN BY: D. KELLOGG	APPROVED: T. RUDER
STATE: NEW MEXICO	CREATION DATE: 12/17/21	APPR. DATE: 12/17/21
Proj. No.: 0300.0002.00	DWG. No.: <b>DDD-PP-100</b>	SHEET No. 1 OF 1
SCALE: 1" = 90'-0"		

FILE LOCATION: N:\PROJECTS\NTACT\DRAW PLANT\02_SITE PLANS & GAS\DDD-PP-100_R0.DWG	LAST SAVED: 12/21/21	BY: Don Kellogg	PLOT TIME/DATE: December 21, 2021
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# Section 6

## All Calculations

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**Show all calculations** used to determine both the hourly and annual controlled and uncontrolled emission rates. All calculations shall be performed keeping a minimum of three significant figures. Document the source of each emission factor used (if an emission rate is carried forward and not revised, then a statement to that effect is required). If identical units are being permitted and will be subject to the same operating conditions, submit calculations for only one unit and a note specifying what other units to which the calculations apply. All formulas and calculations used to calculate emissions must be submitted. The "Calculations" tab in the UA2 has been provided to allow calculations to be linked to the emissions tables. Add additional "Calc" tabs as needed. If the UA2 or other spread sheets are used, all calculation spread sheet(s) shall be submitted electronically in Microsoft Excel compatible format so that formulas and input values can be checked. Format all spread sheets and calculations such that the reviewer can follow the logic and verify the input values. Define all variables. If calculation spread sheets are not used, provide the original formulas with defined variables. Additionally, provide subsequent formulas showing the input values for each variable in the formula. All calculations, including those calculations are imbedded in the Calc tab of the UA2 portion of the application, the printed Calc tab(s), should be submitted under this section.

**Tank Flashing Calculations:** The information provided to the AQB shall include a discussion of the method used to estimate tank-flashing emissions, relative thresholds (i.e., NOI, permit, or major source (NSPS, PSD or Title V)), accuracy of the model, the input and output from simulation models and software, all calculations, documentation of any assumptions used, descriptions of sampling methods and conditions, copies of any lab sample analysis. If Hysis is used, all relevant input parameters shall be reported, including separator pressure, gas throughput, and all other relevant parameters necessary for flashing calculation.

**SSM Calculations:** It is the applicant's responsibility to provide an estimate of SSM emissions or to provide justification for not doing so. In this Section, provide emissions calculations for Startup, Shutdown, and Routine Maintenance (SSM) emissions listed in the Section 2 SSM and/or Section 22 GHG Tables and the rational for why the others are reported as zero (or left blank in the SSM/GHG Tables). Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications ([http://www.env.nm.gov/aqb/permit/app\\_form.html](http://www.env.nm.gov/aqb/permit/app_form.html)) for more detailed instructions on calculating SSM emissions. If SSM emissions are greater than those reported in the Section 2, Requested Allowables Table, modeling may be required to ensure compliance with the standards whether the application is NSR or Title V. Refer to the Modeling Section of this application for more guidance on modeling requirements.

**Glycol Dehydrator Calculations:** The information provided to the AQB shall include the manufacturer's maximum design recirculation rate for the glycol pump. If GRI-Glycalc is used, the full input summary report shall be included as well as a copy of the gas analysis that was used.

**Road Calculations:** Calculate fugitive particulate emissions and enter haul road fugitives in Tables 2-A, 2-D and 2-E for:

1. If you transport raw material, process material and/or product into or out of or within the facility and have PER emissions greater than 0.5 tpy.
2. If you transport raw material, process material and/or product into or out of the facility more frequently than one round trip per day.

### Significant Figures:

**A.** All emissions standards are deemed to have at least two significant figures, but not more than three significant figures.

**B.** At least 5 significant figures shall be retained in all intermediate calculations.

**C.** In calculating emissions to determine compliance with an emission standard, the following rounding off procedures shall be used:

- (1) If the first digit to be discarded is less than the number 5, the last digit retained shall not be changed;
- (2) If the first digit discarded is greater than the number 5, or if it is the number 5 followed by at least one digit other than the number zero, the last figure retained shall be increased by one unit; **and**
- (3) If the first digit discarded is exactly the number 5, followed only by zeros, the last digit retained shall be rounded upward if it is an odd number, but no adjustment shall be made if it is an even number.
- (4) The final result of the calculation shall be expressed in the units of the standard.

**Control Devices:** In accordance with 20.2.72.203.A(3) and (8) NMAC, 20.2.70.300.D(5)(b) and (e) NMAC, and 20.2.73.200.B(7) NMAC, the permittee shall report all control devices and list each pollutant controlled by the control device

regardless if the applicant takes credit for the reduction in emissions. The applicant can indicate in this section of the application if they chose to not take credit for the reduction in emission rates. For notices of intent submitted under 20.2.73 NMAC, only uncontrolled emission rates can be considered to determine applicability unless the state or federal Acts require the control. This information is necessary to determine if federally enforceable conditions are necessary for the control device, and/or if the control device produces its own regulated pollutants or increases emission rates of other pollutants.

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**Compressor Engines (Units ENG-1 through ENG-4)**

Emission factors for NO<sub>x</sub>, CO, VOC, formaldehyde, and GHG are based on manufacturer data. NSCR and Catalytic oxidation for NO<sub>x</sub>, CO, VOC, and formaldehyde are based on vendor guarantees with a factor for operational flexibility. Emission rates for TSP, PM<sub>10</sub>, and PM<sub>2.5</sub> were calculated using AP-42 Table 3.2-2 emission factors. PM<sub>10</sub> and PM<sub>2.5</sub> emissions are set equal to TSP emissions as a conservative measure. SO<sub>2</sub> emissions were calculated based on the units' fuel consumption and a maximum sulfur content of two grains per 100 standard cubic feet (2 gr/100 scf). Only those HAPs greater than 1 tpy were illustrated in the application. GHG emissions were calculated using 40 CFR 98 Subpart C Tier1.

**TEG Dehydrators (Units DEHY-1 & DEHY-2)**

Emission rates were calculated using Promax (gas processing analysis/simulation program) the simulated throughput for the facility was set at a combined total of 90 MMscfd. A copy can be found in Section 7 of this application. The dehydrator is controlled by a Venturi system and a condenser. These controls are 100% efficient. 98% control accounts for fugitive emissions. All vapors are routed to the plant flare (unit FL-2). The system has no vent to the atmosphere.

**Amine Units (Units AU-1 through AU-3)**

Emission rates were calculated using Promax (gas processing analysis/simulation program) based on a combined maximum throughput of 90 MMSCFD for the entire facility. A copy can be found in Section 7 of this application. The Amine units flash tank emissions are collected and sent to a low-pressure inlet of the facility, the regenerator emissions are sent to the AGI system. These controls are 100% efficient. The system has no vent to the atmosphere.

**Amine Regenerator heater, TEG Regenerator heater, Hot oil heater, and Selexol Regenerator heater (Units H-1 through H-5)**

Emission rates for NO<sub>x</sub>, CO, VOC, and PM were calculated using AP-42 factors for external natural gas combustion sources, Table 1.4-1 and 1.4-2. PM<sub>10</sub> and PM<sub>2.5</sub> emissions are set equal to PM emissions as a conservative measure. SO<sub>2</sub> emissions were calculated based on the units' fuel consumption and a maximum sulfur content of two grains per 100 standard cubic feet (2 gr/100 scf). GHG emissions were calculated using 40 CFR 98 Subpart C Tier1.

**Fugitives (Unit FUG)**

Fugitives for the facility were calculated using the component counts for similar facilities and emission factors from EPA/API for oil and gas production facilities.

**Emergency Flare (Unit FL-1 )**

Used in emergency events for acid gas flaring during compressor downtime of acid gas injection system. Pilot Emissions are included for the facility flare, assuming year-round operation of the flare pilot. A copy of the flare pilot calculation is provided in this section. Emission rates for NO<sub>x</sub> and CO are calculated using factors from TNRCC (high btu, other). SO<sub>2</sub> is calculated using a fuel sulfur content of 2 gr sulfur per 100 scf in sweet fuel.

**Process Flare (Unit FL-2)**

Used to control glycol dehydrator emissions. Pilot Emissions are included for the facility flare, assuming year-round operation of the flare pilot. A copy of the flare pilot calculation is provided in this section. Emission rates for NO<sub>x</sub> and CO are calculated using factors from TNRCC (high btu, other). SO<sub>2</sub> is calculated using a fuel sulfur content of 2 gr sulfur per 100 scf in sweet fuel..

**Routine or predictable emissions during Startup, Shutdown and Maintenance (SSM):**

Frontier Field Services, LLC requests 10 tpy of VOC associated with compressor and slug catcher blowdowns that will occur at this facility.

**Malfunction Emissions (M):**

Frontier Field Services, LLC requests 10 tpy of VOC associated with malfunction emissions at this facility.

# Section 6.a

## Green House Gas Emissions

(Submitting under 20.2.70, 20.2.72 20.2.74 NMAC)

**Title V (20.2.70 NMAC), Minor NSR (20.2.72 NMAC), and PSD (20.2.74 NMAC)** applicants must estimate and report greenhouse gas (GHG) emissions to verify the emission rates reported in the public notice, determine applicability to 40 CFR 60 Subparts, and to evaluate Prevention of Significant Deterioration (PSD) applicability. GHG emissions that are subject to air permit regulations consist of the sum of an aggregate group of these six greenhouse gases: carbon dioxide (CO<sub>2</sub>), nitrous oxide (N<sub>2</sub>O), methane (CH<sub>4</sub>), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>).

### Calculating GHG Emissions:

1. Calculate the ton per year (tpy) GHG mass emissions and GHG CO<sub>2</sub>e emissions from your facility.
2. GHG mass emissions are the sum of the total annual tons of greenhouse gases without adjusting with the global warming potentials (GWPs). GHG CO<sub>2</sub>e emissions are the sum of the mass emissions of each individual GHG multiplied by its GWP found in Table A-1 in 40 CFR 98 Mandatory Greenhouse Gas Reporting.
3. Emissions from routine or predictable start up, shut down, and maintenance must be included.
4. Report GHG mass and GHG CO<sub>2</sub>e emissions in Table 2-P of this application. Emissions are reported in **short** tons per year and represent each emission unit's Potential to Emit (PTE).
5. All Title V major sources, PSD major sources, and all power plants, whether major or not, must calculate and report GHG mass and CO<sub>2</sub>e emissions for each unit in Table 2-P.
6. For minor source facilities that are not power plants, are not Title V, and are not PSD there are three options for reporting GHGs in Table 2-P: 1) report GHGs for each individual piece of equipment; 2) report all GHGs from a group of unit types, for example report all combustion source GHGs as a single unit and all venting GHGs as a second separate unit; 3) or check the following ☐ By checking this box, the applicant acknowledges the total CO<sub>2</sub>e emissions are less than 75,000 tons per year.

### Sources for Calculating GHG Emissions:

- Manufacturer's Data
- AP-42 Compilation of Air Pollutant Emission Factors at <http://www.epa.gov/ttn/chief/ap42/index.html>
- EPA's Internet emission factor database WebFIRE at <http://cfpub.epa.gov/webfire/>
- 40 CFR 98 Mandatory Green House Gas Reporting except that tons should be reported in short tons rather than in metric tons for the purpose of PSD applicability.
- API Compendium of Greenhouse Gas Emissions Methodologies for the Oil and Natural Gas Industry. August 2009 or most recent version.
- Sources listed on EPA's NSR Resources for Estimating GHG Emissions at <http://www.epa.gov/nsr/clean-air-act-permitting-greenhouse-gases>:

### Global Warming Potentials (GWP):

Applicants must use the Global Warming Potentials codified in Table A-1 of the most recent version of 40 CFR 98 Mandatory Greenhouse Gas Reporting. The GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to that of one unit mass of CO<sub>2</sub> over a specified time period.

**"Greenhouse gas"** for the purpose of air permit regulations is defined as the aggregate group of the following six gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. **(20.2.70.7 NMAC, 20.2.74.7 NMAC)**. You may also find GHGs defined in 40 CFR 86.1818-12(a).

### Metric to Short Ton Conversion:

Short tons for GHGs and other regulated pollutants are the standard unit of measure for PSD and title V permitting programs. 40 CFR 98 Mandatory Greenhouse Reporting requires metric tons.

1 metric ton = 1.10231 short tons (per Table A-2 to Subpart A of Part 98 – Units of Measure Conversions)

**Frontier Field Services, LLC. - Dagger Draw Gas Plant**  
**Emission Summary**

Uncontrolled Emissions																
Unit	NO <sub>x</sub>		CO		VOC		SO <sub>x</sub>		PM <sub>10</sub>		PM <sub>2.5</sub>		H <sub>2</sub> S		Total HAP	
	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
ENG-1	1.96	8.57	10.76	47.13	2.47	10.80	0.0056	0.024	0.12	0.52	0.12	0.52	-	-	1.14	5.00
ENG-2	1.96	8.57	10.76	47.13	2.47	10.80	0.0056	0.024	0.12	0.52	0.12	0.52	-	-	1.14	5.00
ENG-3	1.96	8.57	10.76	47.13	2.47	10.80	0.0056	0.024	0.12	0.52	0.12	0.52	-	-	1.14	5.00
ENG-4	1.96	8.57	10.76	47.13	2.47	10.80	0.0056	0.024	0.12	0.52	0.12	0.52	-	-	1.14	5.00
ENG-5	3.53	15.45	2.12	9.27	0.88	3.86	0.0029	0.013	0.441	1.93	0.441	1.93	-	-	0.61	2.66
ENG-6	3.53	15.45	2.12	9.27	0.88	3.86	0.0029	0.013	0.441	1.93	0.441	1.93	-	-	0.61	2.66
H-1	2.20	9.62	1.84	8.08	0.12	0.53	1.06E-01	4.63E-01	0.17	0.73	0.17	0.73	-	-	-	-
H-2	0.15	0.64	0.12	0.54	0.008	0.035	7.09E-03	3.10E-02	0.011	0.049	0.011	0.049	-	-	-	-
H-3	0.31	1.37	0.26	1.15	0.017	0.075	1.50E-02	6.58E-02	0.024	0.10	0.024	0.10	-	-	-	-
H-4	1.52	6.66	1.28	5.59	0.084	0.37	7.32E-02	3.21E-01	0.12	0.51	0.12	0.51	-	-	-	-
H-5	0.34	1.50	0.29	1.26	0.019	0.08	1.65E-02	7.24E-02	0.026	0.11	0.026	0.11	-	-	-	-
DEHY-1	-	-	-	-	65.12	285.23	-	-	-	-	-	-	0.0065	0.028	12.98	56.87
DEHY-2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AU-1	-	-	-	-	377.42	1653.08	-	-	-	-	-	-	3662.97	16043.80	42.33	185.41
AU-2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AU-3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FL-1	0.058	0.25	0.26	1.15	-	-	4.00E-03	1.75E-02	-	-	-	-	-	-	-	-
FL-2	0.016	0.072	0.075	0.33	-	-	4.00E-03	1.75E-02	-	-	-	-	-	-	-	-
FUG	-	-	-	-	4.62	20.23	-	-	-	-	-	-	-	-	0.20	0.88
SSM	-	-	-	-	*	10.00	-	-	-	-	-	-	-	-	-	1.00
MALF	-	-	-	-	*	10.00	-	-	-	-	-	-	-	-	-	1.00
Total	19.47	85.29	51.41	225.18	459.03	2030.55	0.254	1.11	1.70	7.46	1.70	7.46	3662.97	16043.83	61.29	270.47

Controlled Emissions																
Unit	NO <sub>x</sub>		CO		VOC		SO <sub>x</sub>		PM <sub>10</sub>		PM <sub>2.5</sub>		H <sub>2</sub> S		Total HAP	
	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
ENG-1	2.15	9.43	3.23	14.14	0.91	3.97	5.56E-03	0.024	0.12	0.52	0.12	0.52	-	-	0.32	1.40
ENG-2	2.15	9.43	3.23	14.14	0.91	3.97	5.56E-03	0.024	0.12	0.52	0.12	0.52	-	-	0.32	1.40
ENG-3	2.15	9.43	3.23	14.14	0.91	3.97	5.56E-03	0.024	0.12	0.52	0.12	0.52	-	-	0.32	1.40
ENG-4	2.15	9.43	3.23	14.14	0.91	3.97	5.56E-03	0.024	0.12	0.52	0.12	0.52	-	-	0.32	1.40
ENG-5	3.53	15.45	1.06	4.64	1.44	6.32	0.0029	0.013	0.44	1.93	0.44	1.93	-	-	0.61	2.66
ENG-6	3.53	15.45	1.06	4.64	1.44	6.32	0.0029	0.013	0.44	1.93	0.44	1.93	-	-	0.61	2.66
H-1	2.20	9.62	1.84	8.08	0.12	0.53	0.11	0.46	0.17	0.73	0.17	0.73	-	-	-	-
H-2	0.15	0.64	0.12	0.54	0.0081	0.035	0.0071	0.031	0.011	0.049	0.011	0.049	-	-	-	-
H-3	0.31	1.37	0.26	1.15	0.017	0.075	0.015	0.066	0.024	0.10	0.024	0.10	-	-	-	-
H-4	1.52	6.66	1.28	5.59	0.084	0.37	0.07	0.32	0.12	0.51	0.12	0.51	-	-	-	-
H-5	0.34	1.50	0.29	1.26	0.019	0.083	0.017	0.072	0.026	0.11	0.026	0.11	-	-	-	-
DEHY-1	-	-	-	-	-	-	0.00	0.00	-	-	-	-	-	-	0.00	0.00
DEHY-2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AU-1	-	-	-	-	-	-	0.00	0.00	-	-	-	-	-	-	0.00	0.00
AU-2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AU-3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FL-1	0.058	0.25	0.26	1.15	-	-	4.00E-03	1.75E-02	-	-	-	-	-	-	-	-
FL-2	0.18	0.77	0.80	3.52	1.30	5.70	4.00E-03	1.75E-02	-	-	-	-	-	-	0.26	1.14
FUG	-	-	-	-	4.62	20.23	-	-	-	-	-	-	-	-	0.201	0.88
SSM	-	-	-	-	*	10.00	-	-	-	-	-	-	-	-	-	1.00
MALF	-	-	-	-	*	10.00	-	-	-	-	-	-	-	-	-	1.00
Total	20.42	89.42	19.89	87.13	12.68	75.55	0.25	1.11	1.70	7.46	1.70	7.46	0.00	0.00	2.95	14.93
Totals w/o Fugitives	20.42	89.42	19.89	87.13	8.06	55.32	0.25	1.11	1.70	7.46	1.70	7.46	0.00	0.00	2.75	14.05

\*\*\*) denotes that an hourly emission rate is not requested.

<sup>1</sup> The dehydrator is controlled by a Venturi system and a condenser. These controls are 100% efficient. 99% control accounts for fugitive emissions. All vapors are routed back to the inlet. The system has no vent to the atmosphere.



**Emission Calculation Inputs**

Site-Wide		
Description	Value	Unit
Gas Throughput:	90	MMSCFD
Annual Operating Hours	8,760	hr
Daily Operating Hours	24	hr
Permit No:	N/A	
Location:	UTM Zone 13, 610,650 m E, 3,541,130 m N	
Site Elevation	2,884	ft MSL
Fuel Heat Value	1,209.6	Btu/scf

Engine Information		
Description	Value	Unit
Quantity:	4	
Make:	Caterpillar	
Model:	G3606	
Rating:	3550	hp
Stack Height:	50.00	ft
Stack Diameter:	1.67	ft

Engine Information		
Description	Value	Unit
Quantity:	2	
Make:	Alax	
Model:	DPC 2804LE	
Rating:	800	hp
Stack Height:	20.08	ft
Stack Diameter:	1.44	ft

FL-1			
Parameter	Value	Unit	Notes
<b>Pilot</b>			
Hourly Flowrate	200	scf/hr	Design Specification of Flare
Safety Factor	0	%	
<b>Purge Gas</b>			
Hourly Flowrate	500	scf/hr	Design Specification of Flare
Safety Factor	0	%	

FL-2			
Parameter	Value	Unit	Notes
<b>Pilot</b>			
Hourly Flowrate	200	scf/hr	Design Specification of Flare
Safety Factor	0	%	
<b>Purge Gas</b>			
Hourly Flowrate	500	scf/hr	Design Specification of Flare
Safety Factor	0	%	

DEHY-1		
Description		Unit
Quantity:	1	-
Make:		-
Gas Throughput:	90	MMSCFD
Glycol Recirculation Rate:	7	gpm
Controls:	BTEX Condenser, Reboiler, ECI	-

DEHY-2		
Description		Unit
Quantity:	1	-
Make:		-
Gas Throughput:	40	MMSCFD
Glycol Recirculation Rate:	7	gpm
Controls:	BTEX Condenser, Reboiler, ECI	-

Amine Heater		
Description		Unit
Capacity:	22.4	MMBTUH
Quantity:	1	
Stack Height:	16.5	ft
Stack Diameter:	3	ft

TEG Heater		
Description		Unit
Capacity:	1.5	MMBTUH
Quantity:	1	
Stack Height:	18	ft
Stack Diameter:	2	ft

Mole Sieve Regen Heater		
Description		Unit
Capacity:	3.18	MMBTUH
Quantity:	1	
Stack Height:	14	ft
Stack Diameter:	2	ft

Hot Oil Heater		
Description		Unit
Capacity:	15.5	MMBTUH
Quantity:	1	
Stack Height:	60	ft
Stack Diameter:	2	ft

Selexol Heater		
Description		Unit
Capacity:	3.5	MMBTUH
Quantity:	1	
Stack Height:	54	ft
Stack Diameter:	2.5	ft

Compressor Engine

Engine Input Information:			
Unit(s):	ENG-1 through ENG-4		
Description:	Caterpillar G3606LE		
Horsepower:	1775	bhp	Manufacturer Specification
Maximum Engine RPM:	1000	RPM	Manufacturer Specification
Engine BSFC:	6629.00	Btu/hp-hr	Manufacturer Specification
Fuel heat value:	1,209.58	Btu/scf	LHV for Site
Fuel sulfur content:	2	gr/100scf	Estimated for sour field gas
Operating hours:	8,760	hours/year	Site Specific Hours
Hourly Heat Rate:	11.77	MMBtu/hr	Calculated
Hourly Fuel Usage:	0.009728	MMscf/hr	Calculated
Annual Fuel Usage:	85.21501	MMscf/yr	Calculated

Uncontrolled Emissions														
Emission Factor	NO <sub>x</sub> <sup>1</sup>	CO <sup>1</sup>	VOC <sup>1,5</sup>	SO <sub>2</sub> <sup>2</sup>	PM <sup>3,4</sup>	Formaldehyde <sup>1</sup>	Acetaldehyde <sup>4</sup>	Acrolein <sup>4</sup>	Benzene <sup>4</sup>	E-Benzene <sup>4</sup>	n-Hexane <sup>4</sup>	Toluene <sup>4</sup>	Xylenes <sup>4</sup>	Total HAPs
	0.50	2.75	0.63		0.031	0.26	0.0084	0.0051	0.00044	0.000040	0.0011	0.00041	0.00018	
				0.0020			0.0099	0.0061	0.0005	0.0000	0.0013	0.0005	0.0002	
Hourly Totals	1.96	10.76	2.47	5.56E-03	0.12	1.02	0.07	0.040	0.0035	0.00031	0.009	0.0032	0.0014	1.14
Annual Totals	8.57	47.13	10.80	2.43E-02	0.52	4.46	0.29	0.18	0.015	0.0014	0.038	0.014	0.006	5.00

Controlled Emissions														
Emission Factor	NO <sub>x</sub> <sup>1</sup>	CO <sup>1</sup>	VOC <sup>1,5</sup>	SO <sub>2</sub> <sup>2</sup>	PM <sup>3,4</sup>	Formaldehyde <sup>1</sup>	Acetaldehyde <sup>4</sup>	Acrolein <sup>4</sup>	Benzene <sup>4</sup>	E-Benzene <sup>4</sup>	n-Hexane <sup>4</sup>	Toluene <sup>4</sup>	Xylenes <sup>4</sup>	Total HAPs
	0.50	0.750	0.150		0.031	0.050								
	10%	10%	10%				0.0084	0.0051	0.00044	0.000040	0.0011	0.00041	0.00018	
							0.0099	0.0061	0.0005	0.0000	0.0013	0.0005	0.0002	
Hourly Totals	2.15	3.23	0.91	5.56E-03	0.12	0.20	0.07	0.040	0.0035	0.00031	0.009	0.0032	0.0014	0.32
Annual Totals	9.43	14.14	3.97	2.43E-02	0.52	0.86	0.29	0.18	0.015	0.0014	0.038	0.014	0.006	1.40

Engine Parameters:			
CO2	7569	tpy	
Engine Type:	4SLB		Manufacturer Specification
Exhaust Temperature:	847	F	Manufacturer Specification
Exhaust Flow:	12146	acfm	Manufacturer Specification
Exhaust Flow:	202.43	acfs	Calculated
Stack Diameter:	1.67	ft	Provided by Frontier
Stack Height:	50.0	ft	Provided by Frontier
Exhaust Velocity:	92.8	ft/s	Calculated
SO <sub>2</sub> Percentage of NO <sub>x</sub>	0.26%		Calculated

Notes:

<sup>1</sup> Emissions factors reported on catalyst spec sheet.

<sup>2</sup> SO2 is calculated based on the default fuel sulfur content of 0.002 grains total sulfur per scf.

<sup>3</sup> Assumes PM10 = PM2.5 (condensable and filterable particulate), referenced from AP42 table 3.2-2.

<sup>4</sup> HAPs emissions factors are referenced from AP42 Table 3.2-2 (except formaldehyde: provided in mfg spec sheet).

<sup>5</sup> VOC emissions are calculated with manufacturer/Catalyst specifications, aldehydes are excluded and must be added for accurate total VOC rates.

## Compressor Engine

Engine Input Information:			
Unit(s):	ENG-5 & ENG-6		
Description:	Ajax DPC 2804 LE		
Horsepower:	800	bhp	Manufacturer Specification
Maximum Engine RPM:	440	RPM	Manufacturer Specification
Engine BSFC:	7800.00	Btu/hp-hr	Manufacturer Specification
Fuel heat value:	1,209.58	Btu/scf	LHV for Site
Fuel sulfur content:	2	gr/100scf	Estimated for sour field gas
Operating hours:	8,760	hours/year	Site Specific Hours
Hourly Heat Rate:	6.24	MMbtu/hr	Calculated
Hourly Fuel Usage:	0.005159	MMscf/hr	Calculated
Annual Fuel Usage:	45.19124	MMscf/yr	Calculated

Uncontrolled Emissions															
Emission Factor	NO <sub>x</sub> <sup>1</sup>	CO <sup>1</sup>	VOC <sup>1,5</sup>	SO <sub>2</sub> <sup>2</sup>	PM <sup>3,4</sup>	Formaldehyde <sup>1</sup>	Acetaldehyde <sup>4</sup>	Acrolein <sup>4</sup>	Benzene <sup>4</sup>	E-Benzene <sup>4</sup>	n-Hexane <sup>4</sup>	Toluene <sup>4</sup>	Xylenes <sup>4</sup>	Total HAPs	g/hp-hr lb/MMBtu lb/MMBtu (Adjusted) gr S/scf
	2.00	1.20	0.50		0.10831 0.1284	0.30	0.0078 0.0092	0.0078 0.0092	0.00194 0.0023	0.000108 0.0001	0.0004 0.0005	0.00096 0.0011	0.00027 0.0003		
Hourly Totals	3.53	2.12	0.88	2.95E-03	0.44	0.53	0.03	0.032	0.0079	0.00044	0.002	0.0039	0.0011	0.61	lb/hr
Annual Totals	15.45	9.27	3.86	1.29E-02	1.93	2.32	0.14	0.14	0.035	0.0019	0.008	0.017	0.005	2.66	ton/yr

Controlled Emissions															
Emission Factor	NO <sub>x</sub> <sup>1</sup>	CO <sup>1</sup>	VOC <sup>1,5</sup>	SO <sub>2</sub> <sup>2</sup>	PM <sup>3,4</sup>	Formaldehyde <sup>1</sup>	Acetaldehyde <sup>4</sup>	Acrolein <sup>4</sup>	Benzene <sup>4</sup>	E-Benzene <sup>4</sup>	n-Hexane <sup>4</sup>	Toluene <sup>4</sup>	Xylenes <sup>4</sup>	Total HAPs	g/hp-hr lb/MMBtu lb/MMBtu (Adjusted) gr S/scf
	2.00	0.60	0.50		0.10831 0.1284	0.300	0.0078 0.0092	0.0078 0.0092	0.00194 0.0023	0.000108 0.0001	0.0004 0.0005	0.00096 0.0011	0.00027 0.0003		
Hourly Totals	3.53	1.06	1.44	2.95E-03	0.44	0.529	0.03	0.032	0.0079	0.00044	0.002	0.0039	0.0011	0.61	lb/hr
Annual Totals	15.45	4.64	6.32	1.29E-02	1.93	2.32	0.14	0.14	0.035	0.0019	0.008	0.017	0.005	2.66	ton/yr

Engine Parameters:			
Engine Type:	4SLB		Manufacturer Specification
Exhaust Temperature:	515	F	Manufacturer Specification
Exhaust Flow:	6320	acfm	Manufacturer Specification
Exhaust Flow:	105.33	acfs	Calculated
Stack Diameter:	1.44	ft	Provided by Frontier
Stack Height:	20.1	ft	Provided by Frontier
Exhaust Velocity:	64.9	ft/s	Calculated
SO <sub>2</sub> Percentage of NO <sub>x</sub>	0.08%		Calculated

## Notes:

<sup>1</sup> Emissions factors reported on catalyst spec sheet<sup>2</sup> SO<sub>2</sub> is calculated based on the default fuel sulfur content of 0.002 grains total sulfur per scf.<sup>3</sup> Assumes PM<sub>10</sub> = PM<sub>2.5</sub> (condensable and filterable particulate), referenced from TABLE 3.2-1 UNCONTROLLED EMISSION FACTORS FOR 2-STROKE LEAN-BURN ENGINES<sup>4</sup> HAPs emissions factors are referenced from Table 3.2-1 UNCONTROLLED EMISSION FACTORS FOR 2-STROKE LEAN-BURN ENGINES<sup>5</sup> VOC emissions are calculated with manufacturer/Catalyst specifications, aldehydes are excluded and must be added for accurate total VOC rates.

## Amine Regenerator Heater

Heater Input Information			
Unit(s):	H-1		
Description:	22.4 MMBtu/hr heater		
Heat input:	22.4	MMBtu/hr	Estimated heat input
Fuel heat value:	1,209.6	Btu/scf	Estimated heating value
Fuel sulfur content:	2	gr/100scf	Estimated for sour field gas
Operating hours:	8,760	hours/year	
Fuel Usage:	18.52	Mscf/hr	

	NO <sub>x</sub>	CO	VOC	SO <sub>2</sub>	PM		
	100.00	84.00	5.50		7.60	lb/MMscf	Unit emission rates from AP-42 Table 1.4-1 & 2
	118.59	99.61	6.52		9.01	lb/MMscf	Adjusted emission factor: EFF X (Gas Heat Value/1,020 Btu/scf)
				0.0029		lb S/Mscf	Field gas assumed to contain 2 gr S/100scf
				0.1058		lb SO <sub>2</sub> /hr	SO <sub>2</sub> Rate * fuel usage
Total Emissions	2.20	1.84	0.121	0.11	0.17	lb/hr	lb/MMscf * (Mscf/hr / 1000 Mscf/1 MMscf)
	9.62	8.08	0.529	0.46	0.73	tpy	lb/hr * 8760 hrs/yr / 2000 lb/ton

Parameters	Value	Unit	Note
Input heat rate	22.40	MMBtu/hr	Estimated
Fuel heat value	1,210	Btu/scf	Estimated, nominal
Fuel rate	18.52	Mscf/hr	Input heat rate / fuel heat value
Annual fuel usage	162.22	MMscf/yr	8760 actual hrs/yr operation

Parameters	Value	Unit	Note
Input heat rate	22.40	MMBtu/hr	
Exhaust temp	600	°F	Engineering Estimate
Stack height	17	ft	Engineering Estimate
Stack diameter	2.67	ft	Engineering Estimate
Exhaust flow (Actual)	15789	acfm	Flow (acfm) = Flow (scfm) * (Stack Temp + 460) / 528 * 29.92 / Site Bar. Pres. / (100% - Moisture%)
Exhaust flow (Actual)	263.15	acfs	Flow (acfs) = Flow (acfm) / 60s/min
Exhaust velocity	47.00	ft/sec	Exhaust flow / stack area
O <sub>2</sub> F factor	8,710	dscf/MMBtu	Method 9
Moisture	10	%	Nominal
Exhaust flow (Dry)	6235.0	dscfm	Flow (dscfm) = heat input * O <sub>2</sub> F * [20.9 / (20.9 - O <sub>2</sub> %)]
O <sub>2</sub> %	10	%	
Site Elevation	3,465	ft MSL	
Pressure at Elevation	26.36	in Hg	

GHGs	EF	Units	Source	H-1	GWP	H-1
				mt/yr		mt CO <sub>2e</sub> /yr
CO <sub>2</sub>	53.06	kg/MMBtu	40 CFR 98	1.189	1	1.19
CH <sub>4</sub>	1.00E-03	kg/MMBtu	40 CFR 98	2.24E-05	25	5.60E-04
N <sub>2</sub> O	1.00E-04	kg/MMBtu	40 CFR 98	2.24E-06	298	6.68E-04
					Total	1.19

## TEG Heater

Heater Input Information			
Unit(s):	H-2		
Description:	1.5 MMBtu/hr heater		
Heat input:	1.5	MMBtu/hr	Estimated heat input
Fuel heat value:	1,209.6	Btu/scf	Estimated heating value
Fuel sulfur content:	2	gr/100scf	Estimated for sour field gas
Operating hours:	8,760	hours/year	
Fuel Usage:	1.24	Mscf/hr	

	NO <sub>x</sub>	CO	VOC	SO <sub>2</sub>	PM		
	100.00	84.00	5.50		7.60	lb/MMscf	Unit emission rates from AP-42 Table 1.4-1 & 2
	118.59	99.61	6.52		9.01	lb/MMscf	Adjusted emission factor: EFF X (Gas Heat Value/1,020 Btu/scf)
				0.0029		lb S/Mscf	Field gas assumed to contain 2 gr S/100scf
				0.0071		lb SO <sub>2</sub> /hr	SO <sub>2</sub> Rate * fuel usage
Total Emissions	0.15	0.12	0.008	0.007	0.011	lb/hr	lb/MMscf * (Mscf/hr / 1000 Mscf/1 MMscf)
	0.64	0.54	0.035	0.031	0.049	tpy	lb/hr * 8760 hrs/yr / 2000 lb/ton

Parameters	Value	Unit	Note
Input heat rate	1.50	MMBtu/hr	Estimated
Fuel heat value	1,210	Btu/scf	Estimated, nominal
Fuel rate	1.24	Mscf/hr	Input heat rate / fuel heat value
Annual fuel usage	10.86	MMscf/yr	8760 actual hrs/yr operation

Parameters	Value	Unit	Note
Input heat rate	1.50	MMBtu/hr	
Exhaust temp	600	°F	Engineering Estimate
Stack height	18	ft	Engineering Estimate
Stack diameter	1.50	ft	Engineering Estimate
Exhaust flow (Actual)	1057	acfm	Flow (acfm) = Flow (scfm) * (Stack Temp + 460) / 528 * 29.92 / Site Bar. Pres. / (100% - Moisture%)
Exhaust flow (Actual)	17.62	acfs	Flow (acfs) = Flow (acfm) / 60s/min
Exhaust velocity	9.97	ft/sec	Exhaust flow / stack area
O <sub>2</sub> F factor	8,710	dscf/MMBtu	Method 9
Moisture	10	%	Nominal
Exhaust flow (Dry)	417.5	dscfm	Flow (dscfm) = heat input * O <sub>2</sub> F * [20.9 / (20.9 - O <sub>2</sub> %)]
O <sub>2</sub> %	10	%	
Site Elevation	3,465	ft MSL	
Pressure at Elevation	26.36	in Hg	

GHGs	EF	Units	Source	H-2	GWP	H-2
				mt/yr		mt CO <sub>2e</sub> /yr
CO <sub>2</sub>	53.06	kg/MMBtu	40 CFR 98	0.080	1	0.08
CH <sub>4</sub>	1.00E-03	kg/MMBtu	40 CFR 98	1.50E-06	25	3.75E-05
N <sub>2</sub> O	1.00E-04	kg/MMBtu	40 CFR 98	1.50E-07	298	4.47E-05
				Total		0.08

## Mole Sieve Regen Heater

Heater Input Information			
Unit(s):	H-3		
Description:	3.18 MMBtu/hr heater		
Heat input:	3.18	MMBtu/hr	Estimated heat input
Fuel heat value:	1,209.6	Btu/scf	Estimated heating value
Fuel sulfur content:	2	gr/100scf	Estimated for sour field gas
Operating hours:	8,760	hours/year	
Fuel Usage:	2.63	Mscf/hr	

	NO <sub>x</sub>	CO	VOC	SO <sub>2</sub>	PM		
	100.00	84.00	5.50		7.60	lb/MMscf	Unit emission rates from AP-42 Table 1.4-1 & 2
	118.59	99.61	6.52		9.01	lb/MMscf	Adjusted emission factor: EFF X (Gas Heat Value/1,020 Btu/scf)
				0.0029		lb S/Mscf	Field gas assumed to contain 2 gr S/100scf
				0.0150		lb SO <sub>2</sub> /hr	SO <sub>2</sub> Rate * fuel usage
Total Emissions	0.31	0.26	0.017	0.015	0.024	lb/hr	lb/MMscf * (Mscf/hr / 1000 Mscf/1 MMscf)
	1.37	1.15	0.075	0.066	0.104	tpy	lb/hr * 8760 hrs/yr / 2000 lb/ton

Parameters	Value	Unit	Note
Input heat rate	3.18	MMBtu/hr	Estimated
Fuel heat value	1,210	Btu/scf	Estimated, nominal
Fuel rate	2.63	Mscf/hr	Input heat rate / fuel heat value
Annual fuel usage	23.03	MMscf/yr	8760 actual hrs/yr operation

Parameters	Value	Unit	Note
Input heat rate	3.18	MMBtu/hr	
Exhaust temp	600	°F	Engineering Estimate
Stack height	14	ft	Engineering Estimate
Stack diameter	1.50	ft	Engineering Estimate
Exhaust flow (Actual)	2241	acfm	Flow (acfm) = Flow (scfm) * (Stack Temp + 460) / 528 * 29.92 / Site Bar. Pres. / (100% - Moisture%)
Exhaust flow (Actual)	37.36	acfs	Flow (acfs) = Flow (acfm) / 60s/min
Exhaust velocity	21.14	ft/sec	Exhaust flow / stack area
O <sub>2</sub> F factor	8,710	dscf/MMBtu	Method 9
Moisture	10	%	Nominal
Exhaust flow (Dry)	885.1	dscfm	Flow (dscfm) = heat input * O <sub>2</sub> F * [20.9 / (20.9 - O <sub>2</sub> %)]
O <sub>2</sub> %	10	%	
Site Elevation	3,465	ft MSL	
Pressure at Elevation	26.36	in Hg	

GHGs	EF	Units	Source	H-3	GWP	H-3
				mt/yr		mt CO <sub>2</sub> e/yr
CO <sub>2</sub>	53.06	kg/MMBtu	40 CFR 98	0.169	1	0.17
CH <sub>4</sub>	1.00E-03	kg/MMBtu	40 CFR 98	3.18E-06	25	7.95E-05
N <sub>2</sub> O	1.00E-04	kg/MMBtu	40 CFR 98	3.18E-07	298	9.48E-05
				Total		0.17

## Hot Oil Heater

Heater Input Information			
Unit(s):	H-4		
Description:	15.5 MMBtu/hr heater		
Heat input:	15.5	MMBtu/hr	Estimated heat input
Fuel heat value:	1,209.6	Btu/scf	Estimated heating value
Fuel sulfur content:	2	gr/100scf	Estimated for sour field gas
Operating hours:	8,760	hours/year	
Fuel Usage:	12.81	Mscf/hr	

	NO <sub>x</sub>	CO	VOC	SO <sub>2</sub>	PM		
	100.00	84.00	5.50		7.60	lb/MMscf	Unit emission rates from AP-42 Table 1.4-1 & 2
	118.59	99.61	6.52		9.01	lb/MMscf	Adjusted emission factor: EFF X (Gas Heat Value/1,020 Btu/scf)
				0.0029		lb S/Mscf	Field gas assumed to contain 2 gr S/100scf
				0.0732		lb SO <sub>2</sub> /hr	SO <sub>2</sub> Rate * fuel usage
Total Emissions	1.52	1.28	0.084	0.073	0.115	lb/hr	lb/MMscf * (Mscf/hr / 1000 Mscf/1 MMscf)
	6.66	5.59	0.366	0.321	0.506	tpy	lb/hr * 8760 hrs/yr / 2000 lb/ton

Parameters	Value	Unit	Note
Input heat rate	15.50	MMBtu/hr	Estimated
Fuel heat value	1,210	Btu/scf	Estimated, nominal
Fuel rate	12.81	Mscf/hr	Input heat rate / fuel heat value
Annual fuel usage	112.25	MMscf/yr	8760 actual hrs/yr operation

Parameters	Value	Unit	Note
Input heat rate	15.50	MMBtu/hr	
Exhaust temp	600	°F	Engineering Estimate
Stack height	60	ft	Engineering Estimate
Stack diameter	2.00	ft	Engineering Estimate
Exhaust flow (Actual)	10925	acfm	Flow (acfm) = Flow (scfm) * (Stack Temp + 460) / 528 * 29.92 / Site Bar. Pres. / (100% - Moisture%)
Exhaust flow (Actual)	182.09	acfs	Flow (acfs) = Flow (acfm) / 60s/min
Exhaust velocity	57.96	ft/sec	Exhaust flow / stack area
O <sub>2</sub> F factor	8,710	dscf/MMBtu	Method 9
Moisture	10	%	Nominal
Exhaust flow (Dry)	4314.4	dscfm	Flow (dscfm) = heat input * O <sub>2</sub> F * [20.9 / (20.9 - O <sub>2</sub> %)]
O <sub>2</sub> %	10	%	
Site Elevation	3,465	ft MSL	
Pressure at Elevation	26.36	in Hg	

GHGs	EF	Units	Source	H-4 mt/yr	GWP	H-4 mt CO <sub>2</sub> e/yr
CO <sub>2</sub>	53.06	kg/MMBtu	40 CFR 98	0.822	1	0.82
CH <sub>4</sub>	1.00E-03	kg/MMBtu	40 CFR 98	1.55E-05	25	3.88E-04
N <sub>2</sub> O	1.00E-04	kg/MMBtu	40 CFR 98	1.55E-06	298	4.62E-04
				Total		0.82



## Selexol Heater

Heater Input Information			
Unit(s):	H-5		
Description:	3.5 MMBtu/hr heater		
Heat input:	3.5	MMBtu/hr	Estimated heat input
Fuel heat value:	1,209.6	Btu/scf	Estimated heating value
Fuel sulfur content:	2	gr/100scf	Estimated for sour field gas
Operating hours:	8,760	hours/year	
Fuel Usage:	2.89	Mscf/hr	

	NO <sub>x</sub>	CO	VOC	SO <sub>2</sub>	PM		
	100.00	84.00	5.50		7.60	lb/MMscf	Unit emission rates from AP-42 Table 1.4-1 & 2
	118.59	99.61	6.52		9.01	lb/MMscf	Adjusted emission factor: EFF X (Gas Heat Value/1,020 Btu/scf)
				0.0029		lb S/Mscf	Field gas assumed to contain 2 gr S/100scf
				0.0165		lb SO <sub>2</sub> /hr	SO <sub>2</sub> Rate * fuel usage
Total Emissions	0.34	0.29	0.019	0.017	0.026	lb/hr	lb/MMscf * (Mscf/hr / 1000 Mscf/1 MMscf)
	1.50	1.26	0.083	0.072	0.114	tpy	lb/hr * 8760 hrs/yr / 2000 lb/ton

Parameters	Value	Unit	Note
Input heat rate	3.50	MMBtu/hr	Estimated
Fuel heat value	1,210	Btu/scf	Estimated, nominal
Fuel rate	2.89	Mscf/hr	Input heat rate / fuel heat value
Annual fuel usage	25.35	MMscf/yr	8760 actual hrs/yr operation

Parameters	Value	Unit	Note
Input heat rate	3.50	MMBtu/hr	
Exhaust temp	600	°F	Engineering Estimate
Stack height	54	ft	Engineering Estimate
Stack diameter	2.50	ft	Engineering Estimate
Exhaust flow (Actual)	2467	acfm	Flow (acfm) = Flow (scfm) * (Stack Temp + 460) / 528 * 29.92 / Site Bar. Pres. / (100% - Moisture%)
Exhaust flow (Actual)	41.12	acfs	Flow (acfs) = Flow (acfm) / 60s/min
Exhaust velocity	8.38	ft/sec	Exhaust flow / stack area
O <sub>2</sub> F factor	8,710	dscf/MMBtu	Method 9
Moisture	10	%	Nominal
Exhaust flow (Dry)	974.2	dscfm	Flow (dscfm) = heat input * O <sub>2</sub> F * [20.9 / (20.9 - O <sub>2</sub> %)]
O <sub>2</sub> %	10	%	
Site Elevation	3,465	ft MSL	
Pressure at Elevation	26.36	in Hg	

GHGs	EF	Units	Source	H-5	GWP	H-5
				mt/yr		mt CO <sub>2</sub> e/yr
CO <sub>2</sub>	53.06	kg/MMBtu	40 CFR 98	0.186	1	0.19
CH <sub>4</sub>	1.00E-03	kg/MMBtu	40 CFR 98	3.50E-06	25	8.75E-05
N <sub>2</sub> O	1.00E-04	kg/MMBtu	40 CFR 98	3.50E-07	298	1.04E-04
				Total		0.19

**Glycol Dehydrator**

**Unit:** DEHY-1 & DEHY-2  
**Description:** Glycol Dehydrators  
**Control Equipment:** Process Flare (Unit FL-2)

Component	Flash Tank Emissions <sup>1</sup>		Uncontrolled Regenerator Emissions <sup>1</sup>		Total Uncontrolled Emissions <sup>1</sup>		Total Controlled Emissions <sup>2</sup>	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
Hydrogen Sulfide	1.42E-03	6.20E-03	5.04E-03	2.21E-02	6.45E-03	2.83E-02	0.00E+00	0.00E+00
N2	2.14E-01	9.38E-01	4.58E-03	2.01E-02	2.19E-01	9.58E-01	0.00E+00	0.00E+00
C1	1.54E+01	6.75E+01	1.26E+00	5.50E+00	1.67E+01	7.30E+01	0.00E+00	0.00E+00
CO2	1.98E-05	8.65E-05	1.49E-05	6.51E-05	3.46E-05	1.52E-04	0.00E+00	0.00E+00
C2	1.40E+01	6.14E+01	3.89E+00	1.70E+01	1.79E+01	7.85E+01	0.00E+00	0.00E+00
C3	1.32E+01	5.77E+01	6.81E+00	2.98E+01	2.00E+01	8.76E+01	0.00E+00	0.00E+00
iC4	2.15E+00	9.40E+00	1.45E+00	6.35E+00	3.59E+00	1.57E+01	0.00E+00	0.00E+00
C4	5.92E+00	2.59E+01	5.87E+00	2.57E+01	1.18E+01	5.17E+01	0.00E+00	0.00E+00
iC5	1.96E+00	8.60E+00	2.81E+00	1.23E+01	4.78E+00	2.09E+01	0.00E+00	0.00E+00
nC5	1.88E+00	8.24E+00	3.06E+00	1.34E+01	4.94E+00	2.16E+01	0.00E+00	0.00E+00
i-Hexane	6.42E-01	2.81E+00	1.45E+00	6.36E+00	2.09E+00	9.17E+00	0.00E+00	0.00E+00
Hexane	3.22E-01	1.41E+00	8.14E-01	3.56E+00	1.14E+00	4.97E+00	0.00E+00	0.00E+00
Benzene	2.47E-01	1.08E+00	7.95E+00	3.48E+01	8.20E+00	3.59E+01	0.00E+00	0.00E+00
Cyclohexane	3.05E-01	1.34E+00	2.02E+00	8.85E+00	2.33E+00	1.02E+01	0.00E+00	0.00E+00
i-Heptane	3.57E-01	1.56E+00	9.18E-01	4.02E+00	1.27E+00	5.58E+00	0.00E+00	0.00E+00
n-Heptane	7.20E-02	3.15E-01	2.03E-01	8.89E-01	2.75E-01	1.20E+00	0.00E+00	0.00E+00
Toluene	9.78E-02	4.28E-01	3.11E+00	1.36E+01	3.21E+00	1.41E+01	0.00E+00	0.00E+00
i-Octane	2.65E-01	1.16E+00	7.18E-01	3.15E+00	9.84E-01	4.31E+00	0.00E+00	0.00E+00
n-Octane	1.19E-02	5.21E-02	2.61E-02	1.14E-01	3.80E-02	1.66E-01	0.00E+00	0.00E+00
Ethylbenzene	7.17E-03	3.14E-02	1.46E-01	6.39E-01	1.53E-01	6.70E-01	0.00E+00	0.00E+00
m-Xylene	1.25E-02	5.49E-02	2.78E-01	1.22E+00	2.90E-01	1.27E+00	0.00E+00	0.00E+00
o-Xylene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
p-Xylene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nonane	1.40E-02	6.14E-02	2.54E-02	1.11E-01	3.94E-02	1.73E-01	0.00E+00	0.00E+00
Decane	3.79E-03	1.66E-02	4.54E-03	1.99E-02	8.32E-03	3.65E-02	0.00E+00	0.00E+00
<b>VOC</b>	<b>27.4524</b>	<b>120.242</b>	<b>37.67</b>	<b>164.99</b>	<b>65.12</b>	<b>285.23</b>	<b>0.00</b>	<b>0.00</b>
<b>HAP</b>	<b>0.68681</b>	<b>3.00825</b>	<b>12.297</b>	<b>53.86</b>	<b>12.98</b>	<b>56.87</b>	<b>0.00</b>	<b>0.00</b>

Dehy Emission Summary	Uncontrolled <sup>1</sup>		Controlled <sup>2</sup>	
	lb/hr	ton/yr	lb/hr	ton/yr
VOC	65.12	285.23	0.00	0.00
HAP	12.98	56.87	0.00	0.00
H <sub>2</sub> S	0.01	0.03	0.00E+00	0.00E+00

**Notes**

<sup>1</sup> Uncontrolled emissions from the regenerator are calculated using BR&E ProMax.

<sup>2</sup> 100% of emissions from the flash tank and regenerator are captured and routed to the process flare (Unit FL-2).

**Amine Unit**

**Unit:** AU-1 through Au-3  
**Description:** Amine units  
**Control Equipment:** AGI Well

Component	Uncontrolled Flash tank Emissions <sup>1</sup>		Uncontrolled Regenerator Emissions <sup>1</sup>		Total Uncontrolled Emissions <sup>1</sup>		Total Controlled Emissions <sup>2</sup>	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
Hydrogen Sulfide	2.71E+00	1.18E+01	3660.26	16031.95	3.66E+03	1.60E+04	0.00E+00	0.00E+00
N2	1.86E+00	8.17E+00	6.65E-02	2.91E-01	1.93E+00	8.46E+00	0.00E+00	0.00E+00
C1	1.20E+02	5.24E+02	1.58E+01	6.90E+01	1.35E+02	5.93E+02	0.00E+00	0.00E+00
CO2	3.66E-01	1.60E+00	4.10E+03	1.80E+04	4.10E+03	1.80E+04	0.00E+00	0.00E+00
C2	6.00E+01	2.63E+02	1.47E+01	6.44E+01	7.48E+01	3.27E+02	0.00E+00	0.00E+00
C3	2.96E+01	1.30E+02	6.11E+00	2.68E+01	3.58E+01	1.57E+02	0.00E+00	0.00E+00
iC4	3.20E+00	1.40E+01	5.27E-01	2.31E+00	3.73E+00	1.63E+01	0.00E+00	0.00E+00
C4	9.94E+00	4.36E+01	2.45E+00	1.07E+01	1.24E+01	5.43E+01	0.00E+00	0.00E+00
iC5	1.73E+00	7.58E+00	2.54E-01	1.11E+00	1.98E+00	8.69E+00	0.00E+00	0.00E+00
nC5	1.87E+00	8.20E+00	3.43E-01	1.50E+00	2.22E+00	9.71E+00	0.00E+00	0.00E+00
Hexane	2.33E-01	1.02E+00	3.73E-02	1.63E-01	2.71E-01	1.19E+00	0.00E+00	0.00E+00
H2O	3.94E+00	1.73E+01	2.73E+02	1.20E+03	2.77E+02	1.21E+03	0.00E+00	0.00E+00
TEG	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MDEA	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Piperazine	5.69E-04	2.49E-03	3.03E-10	1.33E-09	5.69E-04	2.49E-03	0.00E+00	0.00E+00
UCARSOL™ AP-814	7.35E-03	3.22E-02	3.00E-09	1.32E-08	7.35E-03	3.22E-02	0.00E+00	0.00E+00
i-Hexane	5.00E-01	2.19E+00	8.04E-02	3.52E-01	5.80E-01	2.54E+00	0.00E+00	0.00E+00
Benzene	1.07E+00	4.67E+00	25.76	112.81	2.68E+01	1.17E+02	0.00E+00	0.00E+00
Cyclohexane	6.43E-01	2.81E+00	5.92E-01	2.59E+00	1.23E+00	5.41E+00	0.00E+00	0.00E+00
i-Heptane	1.39E-01	6.08E-01	1.26E-02	5.51E-02	1.51E-01	6.64E-01	0.00E+00	0.00E+00
Toluene	4.06E-01	1.78E+00	1.16E+01	5.06E+01	1.20E+01	5.24E+01	0.00E+00	0.00E+00
i-Octane	7.70E-02	3.37E-01	5.54E-03	2.43E-02	8.25E-02	3.62E-01	0.00E+00	0.00E+00
n-Octane	4.30E-03	1.88E-02	4.31E-04	1.89E-03	4.73E-03	2.07E-02	0.00E+00	0.00E+00
Ethylbenzene	2.81E-02	1.23E-01	7.81E-01	3.42E+00	8.09E-01	3.54E+00	0.00E+00	0.00E+00
m-Xylene	5.17E-02	2.26E-01	2.11E+00	9.23E+00	2.16E+00	9.46E+00	0.00E+00	0.00E+00
o-Xylene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
p-Xylene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nonane	1.73E-03	7.56E-03	5.98E-05	2.62E-04	1.78E-03	7.82E-03	0.00E+00	0.00E+00
Decane	2.79E-04	1.22E-03	6.03E-06	2.64E-05	2.85E-04	1.25E-03	0.00E+00	0.00E+00
n-Heptane	2.63E-02	1.15E-01	2.37E-03	1.04E-02	2.87E-02	1.26E-01	0.00E+00	0.00E+00
<b>VOC</b>	<b>53.52</b>	<b>234.41</b>	<b>323.90</b>	<b>1418.67</b>	<b>377.42</b>	<b>1653.08</b>	<b>0.00</b>	<b>0.00</b>
<b>HAP</b>	<b>2.051</b>	<b>8.98</b>	<b>40.28</b>	<b>176.43</b>	<b>42.33</b>	<b>185.41</b>	<b>0.00</b>	<b>0.00</b>

Dehy Emission Summary	Uncontrolled <sup>1</sup>		Controlled <sup>2</sup>	
	lb/hr	ton/yr	lb/hr	ton/yr
VOC	377.42	1653.08	0.00	0.00
HAP	42.33	185.41	0.00	0.00
H <sub>2</sub> S	3662.97	16043.80	0.0000	0.000

**Notes**

<sup>1</sup> Uncontrolled emissions from the flash tank and regenerator are calculated using BR&E ProMax.

<sup>2</sup> The still overhead vent emissions are routed to the acid gas injection system. The amine flash tank emissions are routed to a low pressure inlet of the facility.

Emergency Flare (FL-1)

Emission Unit: FL-1  
Source Description: Emergency Flare

VOC Heat Input and Flow Rate Calculation

Parameters	Value	Unit	Notes
<b>Purge</b>			
Hourly Volume Flow Rate	500.0	scf/hr	Estimated purge fuel consumption
Natural gas heat value	1209.6	Btu/scf	
Pilot Operation	8760.0	hrs/yr	
Hourly Heat Rate	0.605	MMBtu/hr	
<b>Pilot</b>			
Hourly Volume Flow Rate	200.0	scf/hr	Estimated pilot flare fuel consumption
Natural gas heat value	1209.6	Btu/scf	
Pilot Operation	8760.0	hrs/yr	
Hourly Heat Rate	0.242	MMBtu/hr	
<b>Pilot and Flare</b>			
Pilot+Purge Gas Flow Rate	6.13	MMscf/yr	
Pilot+Purge Gas Heat Rate	7417.141	MMBtu/yr	
Flared and Pilot Gas Heating Value	1209.6	Btu/scf	

Emission Rates

	NOx <sup>2</sup>	CO <sup>2</sup>	VOC <sup>1,2</sup>	SO <sub>2</sub> <sup>2</sup>	H <sub>2</sub> S <sup>3</sup>	HAPs <sup>1,2</sup>	Units	Notes
Emission Factors	0.068	0.31	-	0.0029	-	-	lb/MMBtu	AP-42 Tables 13.5-1 and 13.5-2
				4.00E-03			lb S/Mscf	Natural gas fuel from TEG Dehy, 2 gr S/100scf
				-			lb SO <sub>2</sub> /hr	SO <sub>2</sub> rate * fuel usage
Pilot+Purge Emissions	0.0576	0.2625	-	4.00E-03	-	-	lb/hr	lb/MMBtu * MMBtu/hr
	0.2522	1.1497	-	1.75E-02	-	-	tpy	8760 hr/yr/2000 lb/ton
Total Emissions	5.76E-02	2.62E-01	-	4.00E-03	-	-	lb/hr	Pilot+Purge+Process+Assist gas emissions
	2.52E-01	1.15E+00	-	1.75E-02	-	-	tpy	Pilot+Purge+Process+Assist gas emissions

<sup>1</sup> Efficiency for combustion of VOC, H<sub>2</sub>S and HAPs in flare is: 98%  
<sup>2</sup> Fuel sulfur content is assumed to be 2 gr/100 Scf  
<sup>3</sup> 100% of H<sub>2</sub>S is converted to SO<sub>2</sub>.  
"-." Indicates emissions of this pollutant are not expected

**Process Flare (FL-2)**

Emission Unit: FL-2  
 Source Description: Process Flare

**VOC Heat Input and Flow Rate Calculation**

Parameters	Value	Unit	Notes
Flash gas Flow Rate	8.00E-03	MMscf/d	
Regenerator Flow rate	1.79E-02	MMscf/d	
Total Flow Rate	1.08E-03	MMscf/hr	
Total Flow Rate	1080.43	scf/hr	
Flash gas Heat Value	1550.97	Btu/scf	ProMax Results
Regenerator Heat Value	2458.76	Btu/scf	ProMax Results
Weighted Heat Value	2178.70	Btu/scf	ProMax Results
Total Heating Rate	2.354	MMBtu/hr	Flash gas heating value (Btu/ft <sup>3</sup> ) * Flash gas mass flow (scf/hr) * Total Tank VOC Emissions (tpy)
<b>Purge</b>			
Hourly Volume Flow Rate	500.0	scf/hr	Estimated purge fuel consumption
Natural gas heat value	25.0	Btu/scf	
Pilot Operation	8760.0	hrs/yr	
Hourly Heat Rate	0.013	MMBtu/hr	
<b>Pilot</b>			
Hourly Volume Flow Rate	200.0	scf/hr	Estimated pilot flare fuel consumption
Natural gas heat value	1209.6	Btu/scf	
Pilot Operation	8760.0	hrs/yr	
Hourly Heat Rate	0.242	MMBtu/hr	
<b>Pilot, Purge, and Flare</b>			
Flared and Pilot Gas Flow Rate	15.60	MMscf/yr	
Flared and Pilot Heat rate	31619.33	MMBtu/yr	
Flared and Pilot Gas Heating Value	2027.3	Btu/scf	

Parameter	VOC	HAPs	Units
Flash Tank Emissions	120.242	3.01	tons/yr
Regenerator Emissions	164.992	53.86	tons/yr
<b>Total</b>	<b>285.23</b>	<b>56.87</b>	<b>tons/yr</b>

**Emission Rates**

	NOx <sup>2</sup>	CO <sup>2</sup>	VOC <sup>1,2</sup>	SO <sub>2</sub> <sup>2</sup>	HAPs <sup>1,2</sup>	Units	Notes
Emission Factors	0.068	0.3100		0.0029		lb/MMBtu	AP-42 Tables 13.5-1 and 13.5-2
				4.00E-03		lb S/Mscf	Purchased sweet natural gas fuel, 2 gr S/100scf
						lb SO <sub>2</sub> /hr	SO <sub>2</sub> rate * fuel usage
			285.23		56.87	tpy	Mass Flow Rate from Flash tank and Regenerator
	0.07	0.31				lb/MMBtu	Unit Emission Rate
Pilot + Purge Emissions	0.016	0.075	-	4.00E-03	-	lb/hr	lb/MMBtu * MMBtu/hr
	0.072	0.33	-	1.75E-02	-	tpy	8760 hr/yr/2000 lb/ton
Process Emissions	0.16	0.73	1.3024	-	0.260	lb/hr	
	0.70	3.20	5.7047	-	1.137	tpy	
Total Emissions	<b>1.77E-01</b>	<b>8.05E-01</b>	<b>1.30</b>	<b>4.00E-03</b>	<b>0.26</b>	lb/hr	Pilot Emissions + Process Emissions
	<b>7.73E-01</b>	<b>3.52E+00</b>	<b>5.70</b>	<b>1.75E-02</b>	<b>1.14</b>	tpy	Pilot Emissions + Process Emissions

<sup>1</sup> Efficiency for combustion of VOC, H<sub>2</sub>S and HAPs in flare is:<sup>2</sup> Fuel sulfur content is assumed to be

"-." Indicates emissions of this pollutant are not expected

98%  
 2 gr/100 Scf  
 lb/hr emission rate based on DRE of flare: lb/hr \* (1 - DRE)

**Basis for Fugitive Emissions**

Units with Components	Number
Inlet compression	6
Separators	1
VOC Storage Tanks	4
Dehydrator	2

Component Type	Light Liquid	Gas	Total
Connections	1271	1010	2281
Flanges	0	0	0
Open-Ends	0	0	0
Pumps	0	0	0
Valves	557	345	902
"Others"	22	22	44
<b>TOTALS</b>	<b>1850</b>	<b>1377</b>	<b>3227</b>

Gas VOC Mass Percentage	13.91%
GAS HAP Mass Percentage	0.65%
Light Oil VOC Mass Percentage	100.00%
Light OIL HAP Mass Percentage	5%

Facility-wide Fugitive Emissions Per Piece of Equipment										
Subcomponent		Emission Factor <sup>1</sup>	Control Efficiency	VOC Content <sup>2</sup>	H <sub>2</sub> S Content <sup>2</sup>	HAP Content <sup>2</sup>	Subcomp onent	VOCs	H2S	HAP
Valves	Gas	9.92E-03	0.0%	13.91%	1.1540%	0.00%	345	0.476	3.95E-02	0.00E+00
	Light Oil	5.51E-03	0.0%	100.00%	1.1540%	5.00%	557	3.0699	3.54E-02	1.53E-01
	Heavy Oil	1.85E-05	0.0%	100.00%	1.1540%	5.00%	0	0.00E+00	0.00E+00	0.00E+00
Flanges	Gas	8.60E-04	0.0%	13.91%	1.1540%	0.00%	0	0.000	0.00E+00	0.00E+00
	Light Oil	2.43E-04	0.0%	100.00%	1.1540%	5.00%	0	0.00E+00	0.00E+00	0.00E+00
	Heavy Oil	8.60E-07	0.0%	100.00%	1.1540%	5.00%	0	0.00E+00	0.00E+00	0.00E+00
Connectors	Gas	4.41E-04	0.0%	13.91%	1.1540%	0.00%	1010	0.062	5.14E-03	0.00E+00
	Light Oil	4.63E-04	0.0%	100.00%	1.1540%	5.00%	1271	0.588	6.79E-03	2.94E-02
	Heavy Oil	1.65E-05	0.0%	100.00%	1.1540%	5.00%	0	0.00E+00	0.00E+00	0.00E+00
Pumps	Light Oil	2.87E-02	0.0%	100.00%	1.1540%	5.00%	0	0.00E+00	0.00E+00	0.00E+00
	Heavy Oil	2.87E-02	0.0%	100.00%	1.1540%	5.00%	0	0.00E+00	0.00E+00	0.00E+00
Other	Gas	1.94E-02	0.0%	13.91%	1.1540%	0.00%	22	0.0594	4.93E-03	0.00E+00
	Light Oil	1.65E-02	0.0%	100.00%	1.1540%	5.00%	22	0.364	4.20E-03	1.82E-02
	Heavy Oil	7.06E-05	0.0%	100.00%	1.1540%	5.00%	0	0.00E+00	0.00E+00	0.00E+00
Hourly VOC Emission Rate (lb/hr) <sup>4</sup>							4.62			
Annual VOC Emission Rate (tpy) <sup>5</sup>							20.23			
Hourly H2S Emission Rate (lb/hr) <sup>3</sup>							0.096			
Annual H2S Emission Rate (tpy) <sup>4</sup>							0.42			
Hourly HAP Emission Rate (lb/hr) <sup>4</sup>							0.201			
Annual HAP Emission Rate (tpy) <sup>5</sup>							0.88			

<sup>1</sup> Emission factors from Table 2-4 of EPA Protocol for Equipment Leak Emission Estimates, 1995.<sup>2</sup> Weight percent of gas components are referenced from gasAnalysis<sup>2</sup> Weight percent of liquid components are assumed to be 100 % VOC and 5% HAP<sup>3</sup> Subcomponent counts for each subcomponent are based on estimated average component counts for each piece of equipment.<sup>4</sup> Hourly Emissions [lb/hr] = Emissions Factor [lb/hr/component] \* Weight Content of Chemical Component [%] \* Subcomponent Count.<sup>5</sup> Annual Emissions [ton/yr] = Hourly Emissions [lb/hr] \* 8760 [hr/yr] \* 1/2000 [ton/lb].

*Frontier Field Services, LLC. - Dagger Draw Gas Plant*

**Startup, Shutdown, and Maintenance Emissions**

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Units: SSM

Unit	NO <sub>x</sub>	CO	VOC	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	H <sub>2</sub> S	Total HAPs	
MALF			10.00					1.00	
SSM	-	-	10.00	-	-	-	-	1.00	tons/yr

Notes

<sup>1</sup> Frontier Field Services is requesting emissions from SSM for VOC and HAPs as reported above.

# Section 7

## Information Used To Determine Emissions

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### **Information Used to Determine Emissions shall include the following:**

- ☒ If manufacturer data are used, include specifications for emissions units and control equipment, including control efficiencies specifications and sufficient engineering data for verification of control equipment operation, including design drawings, test reports, and design parameters that affect normal operation.
  - ☐ If test data are used, include a copy of the complete test report. If the test data are for an emissions unit other than the one being permitted, the emission units must be identical. Test data may not be used if any difference in operating conditions of the unit being permitted and the unit represented in the test report significantly effect emission rates.
  - ☒ If the most current copy of AP-42 is used, reference the section and date located at the bottom of the page. Include a copy of the page containing the emissions factors, and clearly mark the factors used in the calculations.
  - ☐ If an older version of AP-42 is used, include a complete copy of the section.
  - ☐ If an EPA document or other material is referenced, include a complete copy.
  - ☐ Fuel specifications sheet.
  - ☒ If computer models are used to estimate emissions, include an input summary (if available) and a detailed report, and a disk containing the input file(s) used to run the model. For tank-flashing emissions, include a discussion of the method used to estimate tank-flashing emissions, relative thresholds (i.e., permit or major source (NSPS, PSD or Title V)), accuracy of the model, the input and output from simulation models and software, all calculations, documentation of any assumptions used, descriptions of sampling methods and conditions, copies of any lab sample analysis.
- 

### **Compressor Engines (Units ENG-1 through ENG-4)**

- AP-42 3.2-2 Natural Gas-fired Reciprocating Engines
- Manufacturer specifications and catalyst guarantee

### **All heaters and reboilers (Units H-1 through H-5)**

- AP-42 1.4-1 & 2 Natural Gas Combustion

### **TEG Dehydrators (Units DEHY-1 & DEHY-2)**

- BR&E ProMax
- Site-specific inlet gas analysis

### **Amine Units (Units AU-1 through AU-3)**

- BR&E ProMax
- Site-specific inlet gas analysis

### **Emergency Flare and Process Flare (Unit FL-1 & FL-2)**

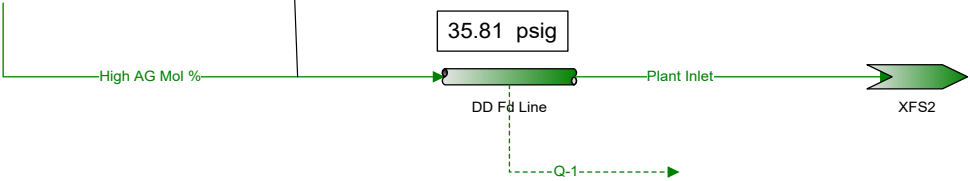
- Site-specific inlet gas analysis.
- TCEQ Emission Factors

### **Fugitives (Unit FUG)**

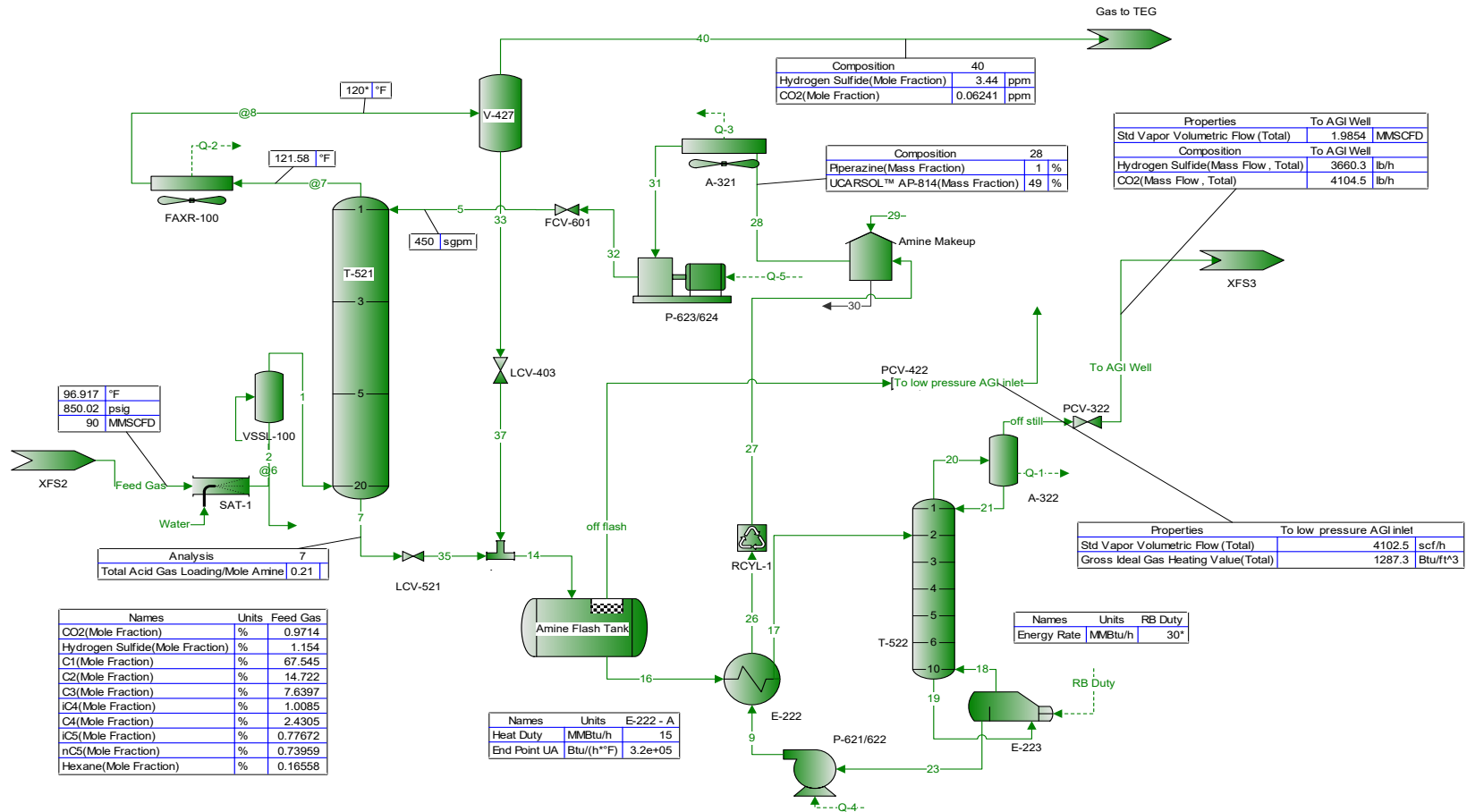
- Site-specific inlet gas analysis
- Liquid analysis derived from BR&E ProMax



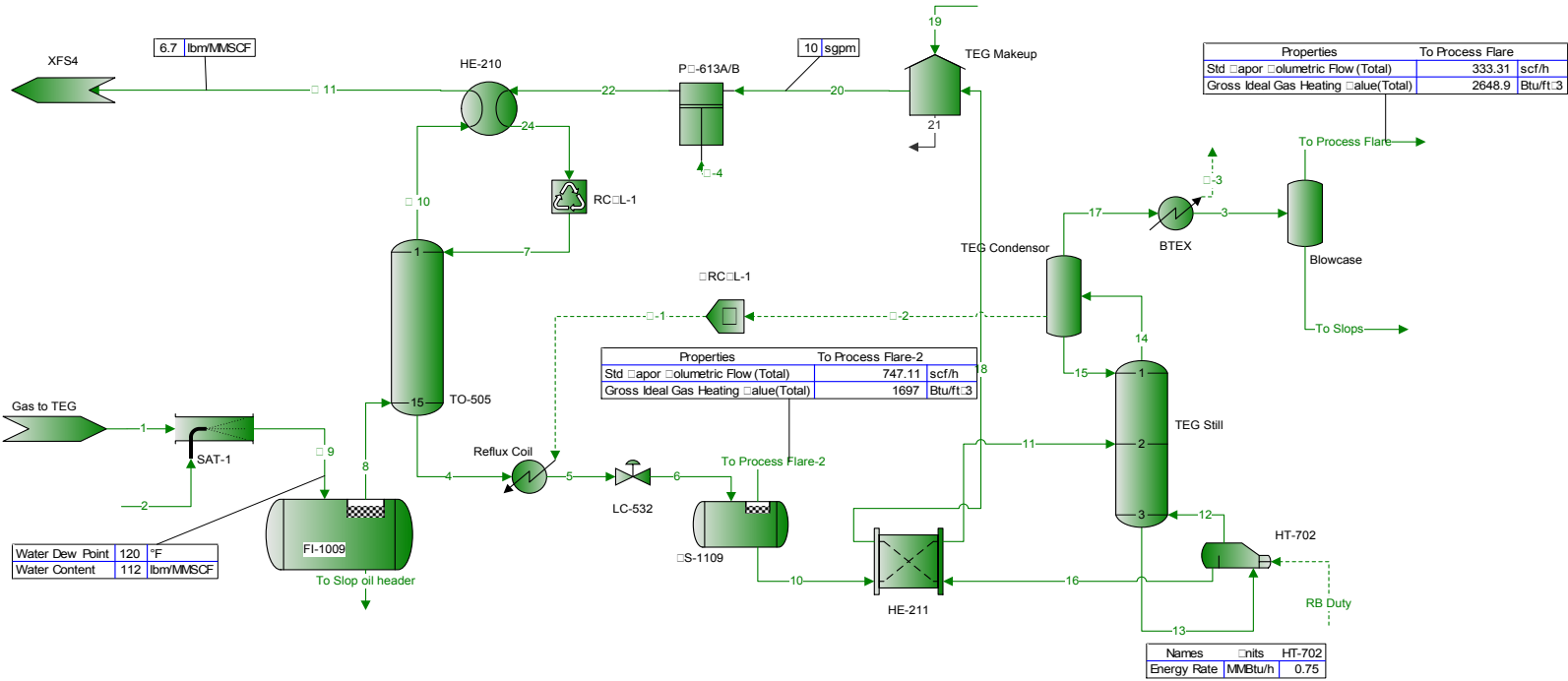
Properties		High AG Mol %
Std Vapor Volumetric Flow (Total)	90*	MMSCFD
Composition		High AG Mol %
Hydrogen Sulfide(Mole Fraction, Total)	1.154*	%



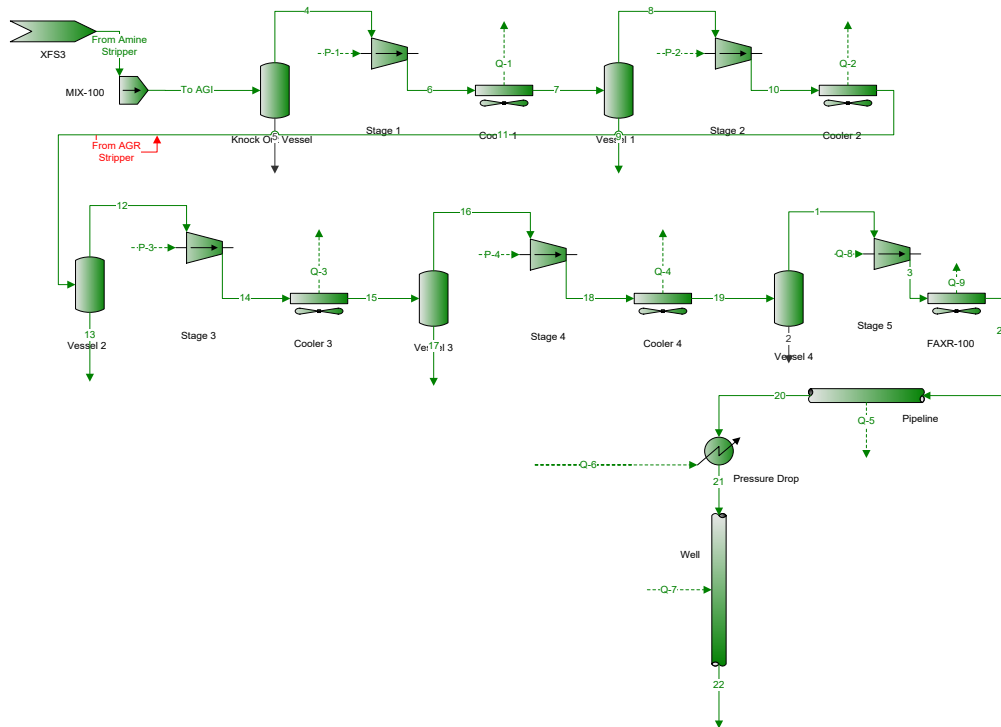
# Amine Treating System



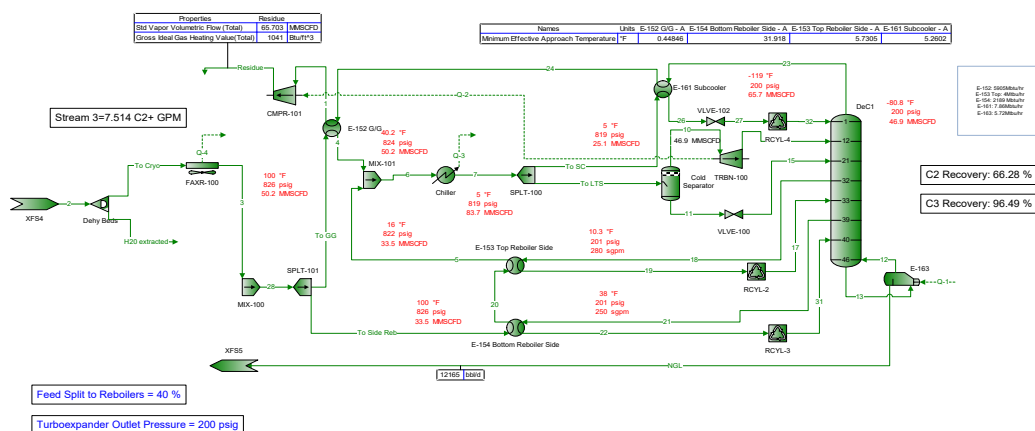
TEG Glycol Dehydration System



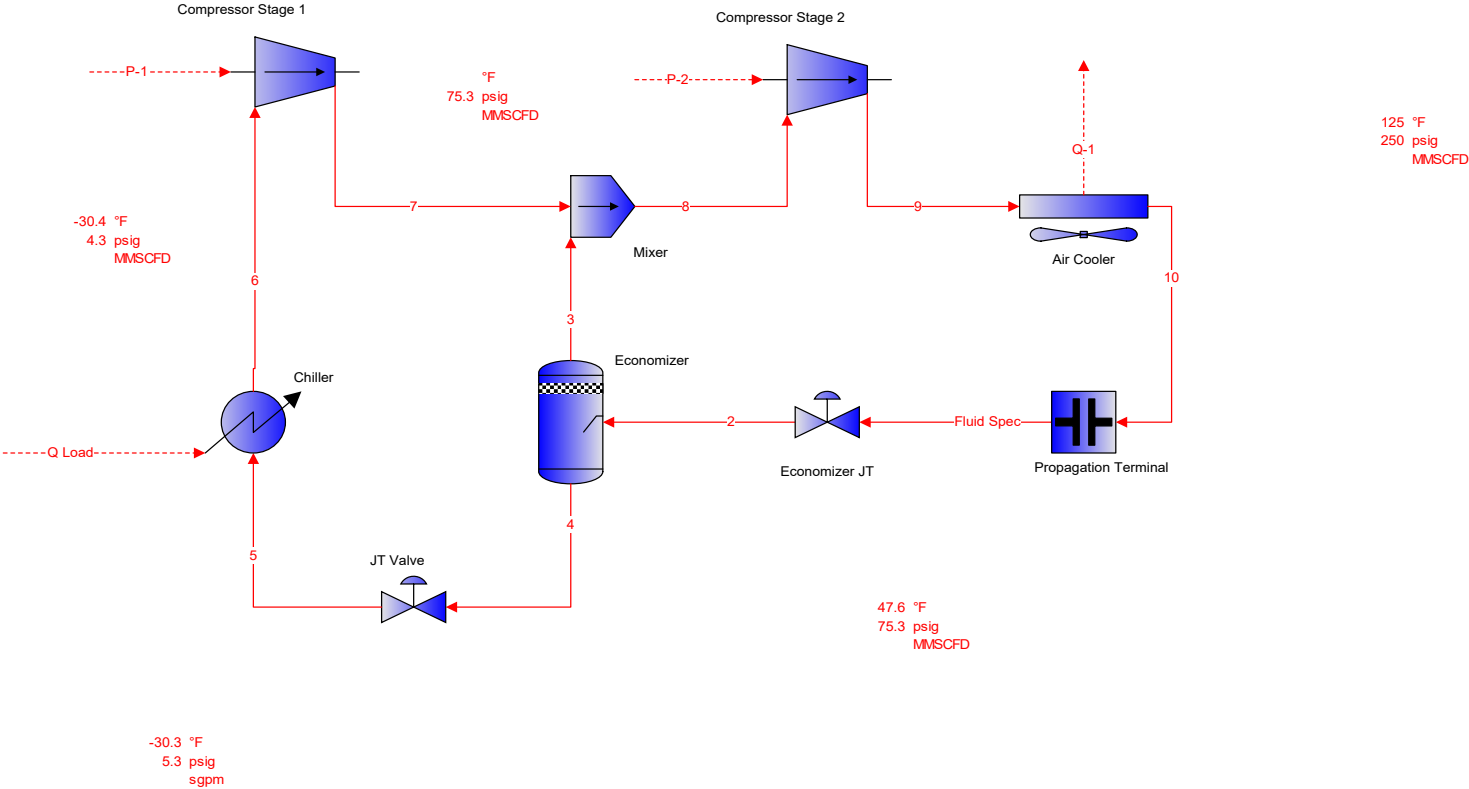
**Acid Gas Injection**  
 adapted from Carroll and Maddocks,  
 Laurance Reid Gas Conditioning Conference, 1999 pp. 90-116



### Dagger Draw Expander



Propane Refrigeration Loop with Economizer



## Equipment Specification

### Proposal Information

Proposal Number: CG-22-000043  
 Project Reference: Durango Midstream - CAT3606LE - Catalyst Spec Sheet  
 Date: 1/5/2022

### Engine Information

Engine Make:	Caterpillar	Speed:	Rated
Engine Model:	G 3606 LE TA	Power Output:	1,775 bhp
Rated Speed:	1000 RPM	Exhaust Flow Rate:	12,129 acfm (cfm)
Fuel Description:	Natural Gas	Exhaust Temperature:	847 ° F
Hours Of Operation:	8750 Hours per year	Fuel Consumption:	6,811 btu/bhp-hr
Load:	100%	O <sub>2</sub> :	12.8%
		H <sub>2</sub> O:	17%

### Emission Data (100% Load)

Emission	Raw Engine Emissions						Target Outlet Emissions						Calculated Reduction
	<i>g/bhp-hr</i>	<i>tons/yr</i>	<i>ppmvd @ 15% O<sub>2</sub></i>	<i>ppmvd</i>	<i>g/kW-hr</i>	<i>lb/MW-hr</i>	<i>g/bhp-hr</i>	<i>tons/yr</i>	<i>ppmvd @ 15% O<sub>2</sub></i>	<i>ppmvd</i>	<i>g/kW-hr</i>	<i>lb/MW-hr</i>	
NO <sub>x</sub> *	0.5	8.56	49	67	0.671	1.48	5	85.6	489	671	6.705	14.78	
CO	2.75	47.08	442	606	3.688	8.13	0.75	12.84	120	165	1.006	2.22	72.7%
THC**	6.3	107.86	1,767	2,426	8.448	18.63							
NMNEHC***	0.63	10.79	177	243	0.845	1.86	0.15	2.57	42	58	0.201	0.44	76.2%
CH <sub>2</sub> O†	0.26	4.45	39	54	0.349	0.77	0.05	0.86	7	10	0.067	0.15	80.8%

### System Specifications

#### **Catalyst (Replacement Catalyst)**

Element Model Number: MECB-OX-RB3494-3275-0000-291  
 Number of Catalyst Layers: 1  
 Number of Catalyst Per Layer: 1  
 Catalyst Back Pressure: 3.0 inWC (Clean)  
 Design Exhaust Flow Rate: 12,129 acfm  
 Design Exhaust Temperature: 847f  
 Dimensions: Ø 32.75 in  
 Exhaust Temperature Limits††: 550f – 1250f (catalyst inlet); 1350f (catalyst outlet)  
 System Pressure Loss: 3.0 inWC (Clean)

\* MW referenced as NO<sub>2</sub>

\*\* MW referenced as CH<sub>4</sub>

\*\*\* MW referenced as CH<sub>4</sub>. Propane in the exhaust shall not exceed 15% by volume of the NMNEHC compounds in the exhaust, excluding aldehydes. The 15% (vol.) shall be established on a wet basis, reported on a methane molecular weight basis. The measurement of exhaust NMNEHC composition shall be based upon EPA method 320 (FTIR), and shall exclude formaldehyde.

† The concentration of formaldehyde in the exhaust shall be measured in real time using an FTIR - EPA method 320 or equivalent

†† General catalyst temperature operating range. Performance is based on the Design Exhaust Temperature.

## Application & Performance Warranty Data

### Project Information

Site Location:	WTX
Project Name:	Durango Midstream - AJAX DPC 2804LE - Housing/Catalyst Replacement
Application:	Prime Power
Number Of Engines:	1
Operating Hours per Year:	8750

### Engine Specifications

Engine Manufacturer:	AJAX
Model Number:	DPC-2804 LE
Rated Speed:	440 RPM
Type of Fuel:	Natural Gas
Type of Lube Oil:	0.6 wt% sulfated ash or less
Lube Oil Consumption:	0.1 % Fuel Consumption
Number of Exhaust Manifolds:	1

### Engine Cycle Data

Load	Speed	Power	Exhaust Flow	Exhaust Temp.	Fuel Cons.	NO <sub>x</sub>	CO	NMHC	NMNEHC	CH <sub>2</sub> O	O <sub>2</sub>	H <sub>2</sub> O
%		bhp	acfm (cfm)	° F		g/bhp-hr	g/bhp-hr	g/bhp-hr	g/bhp-hr	g/bhp-hr	%	%
100	Rated	800	6,320	515		2	1.2	1.2	0.5	0.3	7.8	17

### Emission Data (100% Load)

Emission	Raw Engine Emissions						Target Outlet Emissions						Calculated Reduction
	g/bhp-hr	tons/yr	ppmvd @ 15% O <sub>2</sub>	ppmvd	g/kW-hr	lb/MW-hr	g/bhp-hr	tons/yr	ppmvd @ 15% O <sub>2</sub>	ppmvd	g/kW-hr	lb/MW-hr	
NO <sub>x</sub> *	2	15.43	78	173	2.682	5.91	2	15.43	78	173	2.682	5.91	
CO	1.2	9.26	77	171	1.609	3.55	0.6	4.63	38	85	0.805	1.77	50%
NMNEHC**	0.5	3.86	56	124	0.671	1.48	0.5	3.86	56	124	0.671	1.48	
CH <sub>2</sub> O	0.3	2.31	18	40	0.402	0.89	0.3	2.31	18	40	0.402	0.89	

### System Specifications

#### Oxidation System Specifications (ZCS-30x31-12)

Housing Model Number:	ZCS-30x31-12-HSG-0
Element Model Number:	MEC-TS-SB2969-1550-2475-350
Number of Catalyst Elements:	1
Number of Spare Catalyst Tracks:	2
Sound Attenuation:	22-29 dBA insertion loss
Design Exhaust Flow Rate:	6,320 acfm (cfm)
Design Exhaust Temperature <sup>1</sup> :	515° F
Exhaust Temperature Limits***:	550° F – 1250° F (catalyst inlet); 1350° F (catalyst outlet)
System Pressure Loss:	4.0 inH <sub>2</sub> O (Clean)

\* MW referenced as NO<sub>2</sub>

\*\* MW referenced as CH<sub>4</sub>. Propane in the exhaust shall not exceed 15% by volume of the NMNEHC compounds in the exhaust, excluding aldehydes. The 15% (vol.) shall be established on a wet basis, reported on a methane molecular weight basis. The measurement of exhaust NMNEHC composition shall be based upon EPA method 320 (FTIR), and shall exclude formaldehyde.

\*\*\* General catalyst temperature operating range. Performance is based on the Design Exhaust Temperature.



Model	STD	LE
<b>Fuel Gas System<sup>1</sup></b>		
Fuel pressure range	150 psi (10.3 bar)	150 psi (10.3 bar)
<b>Exhaust System<sup>2</sup></b>		
Exhaust Temperature	465°F (241°C)	515°F (268°C)
Exhaust Flow	233 lb/min (106 kg/min)	239 lb/min (108 kg/min)
<b>Cooling Water System</b>		
Capacity	120 gal (454 l)	120 gal (454 l)
<b>Lube Oil System<sup>3</sup></b>		
Capacity	95 gal (360 l)	95 gal (360 l)
Consumption	28.2 pints/day (13.3 l/day)	28.2 pints/day (13.3 l/day)
Crankcase Makeup	6.6 pints/day (3.1 l/day)	6 pints/day (2.8 l/day)
<b>Brake Specific Fuel Consumption</b>		
100% Load (LHV)	8,000 Btu/bhp-hr (11,319 kJ/kWh)	7,800 Btu/bhp-hr (11,036 kJ/kWh)
<b>Engine Emissions<sup>2</sup></b>		
NOx	12 g/bhp-hr	2 g/bhp-hr
CO	1.2 g/bhp-hr	1.2 g/bhp-hr
NMHC	0.7 g/bhp-hr	0.6 g/bhp-hr
VOC	0.5 g/bhp-hr	0.5 g/bhp-hr
Formaldehyde	0.3 g/bhp-hr	0.3 g/bhp-hr
CO <sub>2</sub>	469 g/bhp-hr	458 g/bhp-hr
<b>Compressor Specifications</b>		
No. of Throws	3	3
Stroke	11" (279 mm)	11" (279 mm)
Piston Speed	807 ft/min (4 m/s)	807 ft/min (4 m/s)
Rod Load	40,000 lb (178 kN)	40,000 lb (178 kN)
Rod Diameter	2.5" (64 mm)	2.5" (64 mm)
Crankshaft Centerline	20" (508 mm)	20" (508 mm)
<b>Dry Weight</b>		
Frame Weight	48,700 lb (22,090 kg)	48,700 lb (22,090 kg)
<b>Dimensions</b>		
Frame Length	171" (4,353 mm)	171" (4,353 mm)
Frame Width	157" (3,987 mm)	157" (3,987 mm)
Frame Height	74" (1,881 mm)	74" (1,881 mm)
Stack Diameter	17¼" (438 mm)	17¼" (438 mm)
Stack Height	241" (6,121 mm)	241" (6,121 mm)
<b>Flywheel</b>		
Outside Diameter	48" (1,219 mm)	48" (1,219 mm)
Weight	2,200 lb (998 kg)	2,200 lb (998 kg)

<sup>1</sup> Fuel gas system pressure noted is maximum pressure at customer connection

<sup>2</sup> Exhaust and emissions noted based on: PLQNG, 1500 FASL elevation, 65°F ambient temperature for STD and LE

<sup>3</sup> Lube oil system consumption rates based on full load and full speed operation. Values do not indicate break-in consumption rates.

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TABLE 3.2-1 UNCONTROLLED EMISSION FACTORS FOR 2-STROKE LEAN-BURN ENGINES<sup>a</sup>  
(SCC 2-02-002-52)

Pollutant	Emission Factor (lb/MMBtu) <sup>b</sup> (fuel input)	Emission Factor Rating
Criteria Pollutants and Greenhouse Gases		
NO <sub>x</sub> <sup>c</sup> 90 - 105% Load	3.17 E+00	A
NO <sub>x</sub> <sup>c</sup> <90% Load	1.94 E+00	A
CO <sup>c</sup> 90 - 105% Load	3.86 E-01	A
CO <sup>c</sup> <90% Load	3.53 E-01	A
CO <sub>2</sub> <sup>d</sup>	1.10 E+02	A
SO <sub>2</sub> <sup>e</sup>	5.88 E-04	A
TOC <sup>f</sup>	1.64 E+00	A
Methane <sup>g</sup>	1.45 E+00	C
VOC <sup>h</sup>	1.20 E-01	C
PM10 (filterable) <sup>i</sup>	3.84 E-02	C
PM2.5 (filterable) <sup>i</sup>	3.84 E-02	C
PM Condensable <sup>j</sup>	9.91 E-03	E
Trace Organic Compounds		
1,1,2,2-Tetrachloroethane <sup>k</sup>	6.63 E-05	C
1,1,2-Trichloroethane <sup>k</sup>	5.27 E-05	C
1,1-Dichloroethane	3.91 E-05	C
1,2,3-Trimethylbenzene	3.54 E-05	D
1,2,4-Trimethylbenzene	1.11 E-04	C
1,2-Dichloroethane	4.22 E-05	D
1,2-Dichloropropane	4.46 E-05	C
1,3,5-Trimethylbenzene	1.80 E-05	D
1,3-Butadiene <sup>k</sup>	8.20 E-04	D
1,3-Dichloropropene <sup>k</sup>	4.38 E-05	C
2,2,4-Trimethylpentane <sup>k</sup>	8.46 E-04	B
2-Methylnaphthalene <sup>k</sup>	2.14 E-05	C
Acenaphthene <sup>k</sup>	1.33 E-06	C

Table 3.2-1. UNCONTROLLED EMISSION FACTORS FOR 2-STROKE LEAN-BURN ENGINES

(Continued)

Pollutant	Emission Factor (lb/MMBtu) <sup>b</sup> (fuel input)	Emission Factor Rating
Acenaphthylene <sup>k</sup>	3.17 E-06	C
Acetaldehyde <sup>k,l</sup>	7.76 E-03	A
Acrolein <sup>k,l</sup>	7.78 E-03	A
Anthracene <sup>k</sup>	7.18 E-07	C
Benz(a)anthracene <sup>k</sup>	3.36 E-07	C
Benzene <sup>k</sup>	1.94 E-03	A
Benzo(a)pyrene <sup>k</sup>	5.68 E-09	D
Benzo(b)fluoranthene <sup>k</sup>	8.51 E-09	D
Benzo(e)pyrene <sup>k</sup>	2.34 E-08	D
Benzo(g,h,i)perylene <sup>k</sup>	2.48 E-08	D
Benzo(k)fluoranthene <sup>k</sup>	4.26 E-09	D
Biphenyl <sup>k</sup>	3.95 E-06	C
Butane	4.75 E-03	C
Butyr/Isobutyraldehyde	4.37 E-04	C
Carbon Tetrachloride <sup>k</sup>	6.07 E-05	C
Chlorobenzene <sup>k</sup>	4.44 E-05	C
Chloroform <sup>k</sup>	4.71 E-05	C
Chrysene <sup>k</sup>	6.72 E-07	C
Cyclohexane	3.08 E-04	C
Cyclopentane	9.47 E-05	C
Ethane	7.09 E-02	A
Ethylbenzene <sup>k</sup>	1.08 E-04	B
Ethylene Dibromide <sup>k</sup>	7.34 E-05	C
Fluoranthene <sup>k</sup>	3.61 E-07	C
Fluorene <sup>k</sup>	1.69 E-06	C
Formaldehyde <sup>k,l</sup>	5.52 E-02	A

Table 3.2-1. UNCONTROLLED EMISSION FACTORS FOR 2-STROKE LEAN-BURN ENGINES  
(Concluded)

Pollutant	Emission Factor (lb/MMBtu) <sup>b</sup> (fuel input)	Emission Factor Rating
Indeno(1,2,3-c,d)pyrene <sup>k</sup>	9.93 E-09	D
Isobutane	3.75 E-03	C
Methanol <sup>k</sup>	2.48 E-03	A
Methylcyclohexane	3.38 E-04	C
Methylene Chloride <sup>k</sup>	1.47 E-04	C
n-Hexane <sup>k</sup>	4.45 E-04	C
n-Nonane	3.08 E-05	C
n-Octane	7.44 E-05	C
n-Pentane	1.53 E-03	C
Naphthalene <sup>k</sup>	9.63 E-05	C
PAH <sup>k</sup>	1.34 E-04	D
Perylene <sup>k</sup>	4.97 E-09	D
Phenanthrene <sup>k</sup>	3.53 E-06	C
Phenol <sup>k</sup>	4.21 E-05	C
Propane	2.87 E-02	C
Pyrene <sup>k</sup>	5.84 E-07	C
Styrene <sup>k</sup>	5.48 E-05	A
Toluene <sup>k</sup>	9.63 E-04	A
Vinyl Chloride <sup>k</sup>	2.47 E-05	C
Xylene <sup>k</sup>	2.68 E-04	A

<sup>a</sup> Reference 7. Factors represent uncontrolled levels. For NO<sub>x</sub>, CO, and PM<sub>10</sub>, “uncontrolled” means no combustion or add-on controls; however, the factor may include turbocharged units. For all other pollutants, “uncontrolled” means no oxidation control; the data set may include units with control techniques used for NO<sub>x</sub> control, such as PCC and SCR for lean burn engines, and PSC for rich burn engines. Factors are based on large population of engines. Factors are for engines at all loads, except as indicated. SCC = Source Classification Code. TOC = Total Organic Compounds. PM<sub>10</sub> = Particulate Matter ≤ 10 microns (μm) aerodynamic diameter. A “<” sign in front of a factor means that the corresponding emission factor is based on one-half of the method detection limit.

<sup>b</sup> Emission factors were calculated in units of (lb/MMBtu) based on procedures in EPA

Method 19. To convert from (lb/MMBtu) to (lb/10<sup>6</sup> scf), multiply by the heat content of the fuel. If the heat content is not available, use 1020 Btu/scf. To convert from (lb/MMBtu) to (lb/hp-hr) use the following equation:

$$\text{lb/hp-hr} = (\text{lb/MMBtu}) (\text{heat input, MMBtu/hr}) (1/\text{operating HP, 1/hp})$$

<sup>c</sup> Emission tests with unreported load conditions were not included in the data set.

<sup>d</sup> Based on 99.5% conversion of the fuel carbon to CO<sub>2</sub>. CO<sub>2</sub> [lb/MMBtu] = (3.67)(%CON)(C)(D)(1/h), where %CON = percent conversion of fuel carbon to CO<sub>2</sub>, C = carbon content of fuel by weight (0.75), D = density of fuel, 4.1 E+04 lb/10<sup>6</sup> scf, and h = heating value of natural gas (assume 1020 Btu/scf at 60°F).

<sup>e</sup> Based on 100% conversion of fuel sulfur to SO<sub>2</sub>. Assumes sulfur content in natural gas of 2,000 gr/10<sup>6</sup> scf.

<sup>f</sup> Emission factor for TOC is based on measured emission levels of 43 tests.

<sup>g</sup> Emission factor for methane is determined by subtracting the VOC and ethane emission factors from the TOC emission factor. Measured emission factor for methane compares well with the calculated emission factor, 1.48 lb/MMBtu vs. 1.45 lb/MMBtu, respectively.

<sup>h</sup> VOC emission factor is based on the sum of the emission factors for all speciated organic compounds less ethane and methane.

<sup>i</sup> Considered ≤ 1 μm in aerodynamic diameter. Therefore, for filterable PM emissions, PM10(filterable) = PM2.5(filterable).

<sup>j</sup> No data were available for condensable PM emissions. The presented emission factor reflects emissions from 4SLB engines.

<sup>k</sup> Hazardous Air Pollutant as defined by Section 112(b) of the Clean Air Act.

<sup>l</sup> For lean burn engines, aldehyde emissions quantification using CARB 430 may reflect interference with the sampling compounds due to the nitrogen concentration in the stack. The presented emission factor is based on FTIR measurements. Emissions data based on CARB 430 are available in the background report.



October 2000  
RG-109 (Draft)

## Air Permit Technical Guidance for Chemical Sources:

# Flares and Vapor Oxidizers

printed on  
recycled paper

Air Permits Division

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TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

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Waste Stream	Destruction/Removal Efficiency (DRE)		
VOC	98 percent (generic)		
	99 percent for compounds containing no more than 3 carbons that contain no elements other than carbon and hydrogen in addition to the following compounds: methanol, ethanol, propanol, ethylene oxide and propylene oxide		
H <sub>2</sub> S	98 percent		
NH <sub>3</sub>	case by case		
CO	case by case		
Air Contaminants	Emission Factors		
thermal NO <sub>x</sub>	steam-assist:	high Btu	0.0485 lb/MMBtu
		low Btu	0.068 lb/MMBtu
	other:	high Btu	0.138 lb/MMBtu
		low Btu	0.0641 lb/MMBtu
fuel NO <sub>x</sub>	NO <sub>x</sub> is 0.5 wt percent of inlet NH <sub>3</sub> , other fuels case by case		
CO	steam-assist:	high Btu	0.3503 lb/MMBtu
		low Btu	0.3465 lb/MMBtu
	other:	high Btu	0.2755 lb/MMBtu
		low Btu	0.5496 lb/MMBtu
PM	none, required to be smokeless		
SO <sub>2</sub>	100 percent S in fuel to SO <sub>2</sub>		

\*The only exception of this is if inorganics might be emitted from the flare. In the case of landfills, the AP-42 PM factor may be used. In other cases, the emissions should be based on the composition of the waste stream routed to the flare.



# Certificate of Analysis

Number: 6030-21110023-001A

Artesia Laboratory

200 E Main St.

Artesia, NM 88210

Phone 575-746-3481

Nov. 01, 2021

Station Name: #1 Inlet  
Station Number: 633000  
Station Location: FFS  
Instrument: 6030\_GC2 (Agilent GC-7890B)  
Last Inst. Cal.: 09/13/2021 14:54 PM  
Analyzed: 11/01/2021 16:00:14 by KJM

Sampled By: Z  
Sample Of: Gas Spot  
Sample Date: 11/01/2021  
Sample Conditions: 37.1 psig, @ 81.6 °F  
Effective Date: 11/01/2021  
Method: GPA 2286

## Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.65 psia		
Hydrogen Sulfide	0.000	0.80000	1.129		GPM TOTAL C2+	8.183
Nitrogen	1.732	1.69600	1.968		GPM TOTAL C3+	4.263
Methane	69.469	68.00900	45.186		GPM TOTAL iC5+	1.076
Carbon Dioxide	0.989	0.96800	1.764			
Ethane	14.985	14.67000	18.269	3.920		
Propane	7.776	7.61300	13.903	2.095		
Iso-butane	1.027	1.00500	2.419	0.329		
n-Butane	2.474	2.42200	5.830	0.763		
Iso-pentane	0.791	0.77400	2.313	0.283		
n-Pentane	0.753	0.73700	2.202	0.267		
Hexanes Plus	1.334	1.30600	5.017	0.526		
	101.330	100.00000	100.000	8.183		

### Calculated Physical Properties

Relative Density Real Gas	0.8373	C6+
Calculated Molecular Weight	24.15	92.58
Compressibility Factor	0.9953	

### GPA 2172 Calculation:

#### Calculated Gross BTU per ft<sup>3</sup> @ 14.65 psia & 60°F

Real Gas Dry BTU	1382	4926
Water Sat. Gas Base BTU	1358	4839
Ideal, Gross HV - Dry at 14.65 psia	1375.6	4925.7
Ideal, Gross HV - Wet	1351.5	0.000

**Comments:** H2S Field Content 0.8 %

Data reviewed by: Krystle Fitzwater, Laboratory Manager

Quality Assurance: The above analyses are performed in accordance with ASTM, UOP, GPA guidelines for quality assurance, unless otherwise stated.



# Certificate of Analysis

Number: 6030-21110023-001A

Artesia Laboratory

200 E Main St.

Artesia, NM 88210

Phone 575-746-3481

Station Name: #1 Inlet  
Station Number: 633000  
Station Location: FFS  
Analyzed: 11/01/2021 16:13:44 by KJM

Nov. 01, 2021  
Sampled By: Z  
Sample Of: Gas Spot  
Sample Date: 11/01/2021  
Sample Conditions: 37.1 psig, @ 81.6 °F  
Method: GPA 2286

## Analytical Data

Components	Mol. %	Wt. %	GPM at 14.65 psia
Hydrogen Sulfide	0.800	1.129	
Nitrogen	1.696	1.968	
Methane	68.009	45.186	
Carbon Dioxide	0.968	1.764	
Ethane	14.670	18.269	3.920
Propane	7.613	13.903	2.095
Iso-Butane	1.005	2.419	0.329
n-Butane	2.422	5.830	0.763
Iso-Pentane	0.774	2.313	0.283
n-Pentane	0.737	2.202	0.267
i-Hexanes	0.286	0.994	0.114
n-Hexane	0.165	0.573	0.067
Benzene	0.095	0.306	0.027
Cyclohexane	0.138	0.477	0.047
i-Heptanes	0.221	0.852	0.089
n-Heptane	0.053	0.220	0.025
Toluene	0.068	0.253	0.022
i-Octanes	0.169	0.741	0.076
n-Octane	0.016	0.077	0.008
Ethylbenzene	0.010	0.042	0.004
Xylenes	0.019	0.088	0.008
i-Nonanes	0.033	0.185	0.018
n-Nonane	0.010	0.050	0.005
Decanes Plus	0.023	0.159	0.016
	100.000	100.000	8.183

### Calculated Physical Properties

Calculated Molecular Weight	Total	C10+
	24.15	149.51

### GPA 2172 Calculation:

#### Calculated Gross BTU per ft<sup>3</sup> @ 14.65 psia & 60°F

Real Gas Dry BTU	1382.1	8019.1
Water Sat. Gas Base BTU	1357.9	7841.5
Relative Density Real Gas	0.8373	5.1622
Compressibility Factor	0.9953	
Ideal, Gross HV - Wet	1351.5	
Ideal, Gross HV - Dry at 14.65 psia	1375.6	
Net BTU Dry Gas - real gas	1258	
Net BTU Wet Gas - real gas	1236	

Comments: H2S Field Content 0.8 %

Data reviewed by: Krystle Fitzwater, Laboratory Manager

Quality Assurance: The above analyses are performed in accordance with ASTM, UOP, GPA guidelines for quality assurance, unless otherwise stated.

# Section 8

## Map(s)

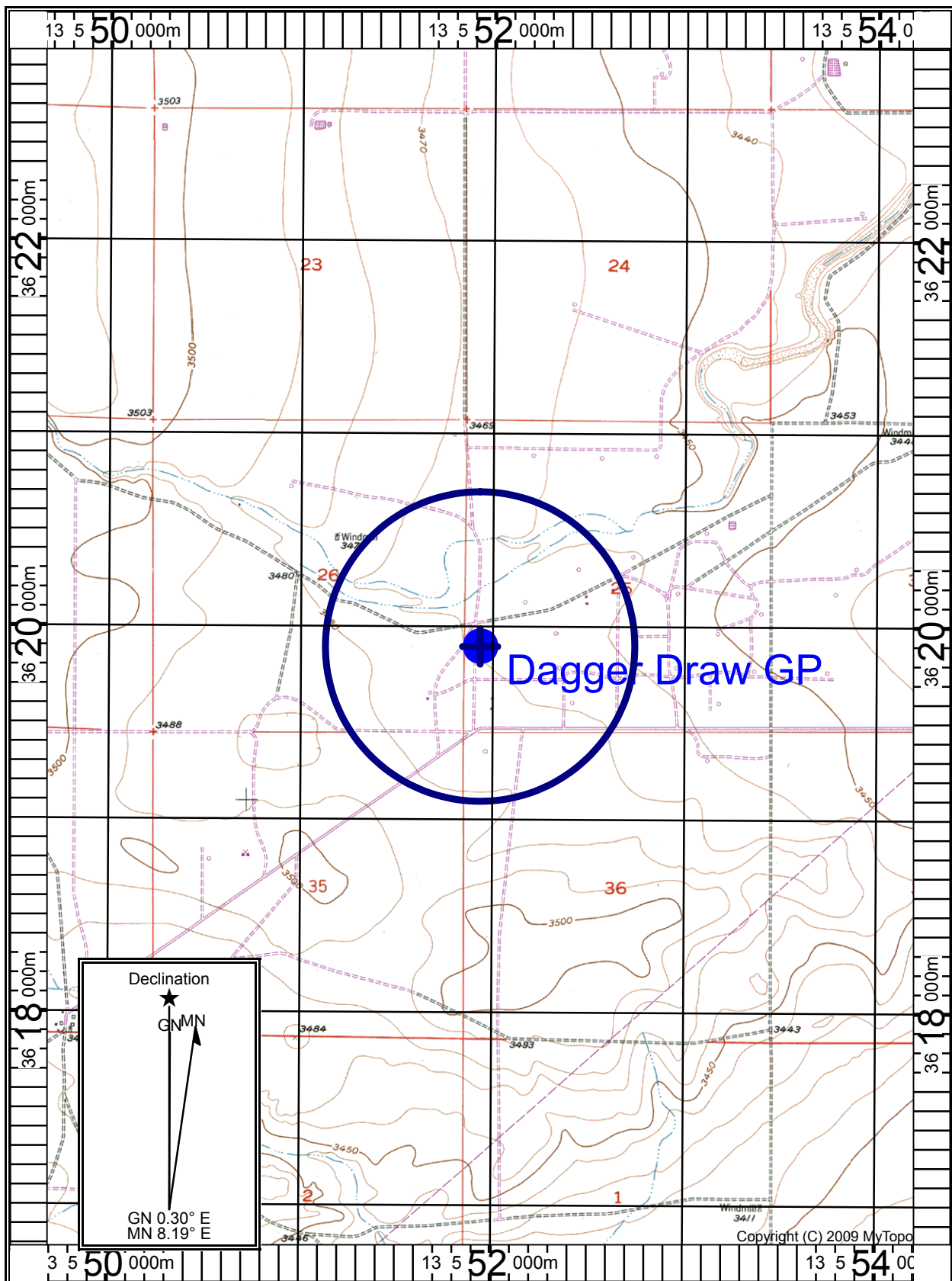
---

**A map** such as a 7.5 minute topographic quadrangle showing the exact location of the source. The map shall also include the following:

The UTM or Longitudinal coordinate system on both axes	An indicator showing which direction is north
A minimum radius around the plant of 0.8km (0.5 miles)	Access and haul roads
Topographic features of the area	Facility property boundaries
The name of the map	The area which will be restricted to public access
A graphical scale	

---

A facility map is attached.



Map Name: DA□TON (NM)  
 Print Date: 11/15/21  
 Scale: 1 inch □ 2,500 ft.  
 Map Center: 13 0551933 E 3619895 N  
 Horizontal Datum: WGS84

# Section 9

## Proof of Public Notice

(for NSR applications submitting under 20.2.72 or 20.2.74 NMAC)

(This proof is required by: 20.2.72.203.A.14 NMAC “Documentary Proof of applicant’s public notice”)

---

**☒ I have read the AQB “Guidelines for Public Notification for Air Quality Permit Applications”**

This document provides detailed instructions about public notice requirements for various permitting actions. It also provides public notice examples and certification forms. Material mistakes in the public notice will require a re-notice before issuance of the permit.

---

Unless otherwise allowed elsewhere in this document, the following items document proof of the applicant’s Public Notification. Please include this page in your proof of public notice submittal with checkmarks indicating which documents are being submitted with the application.

**New Permit** and **Significant Permit Revision** public notices must include all items in this list.

**Technical Revision** public notices require only items 1, 5, 9, and 10.

Per the Guidelines for Public Notification document mentioned above, include:

1. ☒ A copy of the certified letter receipts with post marks (20.2.72.203.B NMAC)
  2. ☒ A list of the places where the public notice has been posted in at least four publicly accessible and conspicuous places, including the proposed or existing facility entrance. (e.g: post office, library, grocery, etc.)
  3. ☒ A copy of the property tax record (20.2.72.203.B NMAC).
  4. ☒ A sample of the letters sent to the owners of record.
  5. ☒ A sample of the letters sent to counties, municipalities, and Indian tribes.
  6. ☒ A sample of the public notice posted and a verification of the local postings.
  7. ☒ A table of the noticed citizens, counties, municipalities and tribes and to whom the notices were sent in each group.
  8. ☒ A copy of the public service announcement (PSA) sent to a local radio station and documentary proof of submittal.
  9. ☒ A copy of the classified or legal ad including the page header (date and newspaper title) or its affidavit of publication stating the ad date, and a copy of the ad. When appropriate, this ad shall be printed in both English and Spanish.
  10. ☒ A copy of the display ad including the page header (date and newspaper title) or its affidavit of publication stating the ad date, and a copy of the ad. When appropriate, this ad shall be printed in both English and Spanish.
  11. ☒ A map with a graphic scale showing the facility boundary and the surrounding area in which owners of record were notified by mail. This is necessary for verification that the correct facility boundary was used in determining distance for notifying land owners of record.
-



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For delivery information, visit our website at <a href="http://www.usps.com">www.usps.com</a> ®.	
Dallas, TX 75201	
Certified Mail Fee \$3.75	0109 05
Extra Services & Fees (check box, add fee as appropriate)	Postmark Here
<input type="checkbox"/> Return Receipt (hardcopy) \$0.00	01/04/2022
<input type="checkbox"/> Return Receipt (electronic) \$0.00	
<input type="checkbox"/> Certified Mail Restricted Delivery \$0.00	
<input type="checkbox"/> Adult Signature Required \$0.00	
<input type="checkbox"/> Adult Signature Restricted Delivery \$0.00	
Postage \$0.58	
Total Postage and Fees \$4.33	
Sent To	
Agave Energy Company	
Street and Apt. No., or PO Box No.	
3100 McKinnon St STE 800	
City, State, ZIP+4®	
Dallas, TX 75201-7014	
PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions	

7019 1640 0000 4703 8543

U.S. Postal Service™ CERTIFIED MAIL® RECEIPT Domestic Mail Only	
For delivery information, visit our website at <a href="http://www.usps.com">www.usps.com</a> ®.	
Houston, TX 77210	
Certified Mail Fee \$3.75	0109 05
Extra Services & Fees (check box, add fee as appropriate)	Postmark Here
<input type="checkbox"/> Return Receipt (hardcopy) \$0.00	01/04/2022
<input type="checkbox"/> Return Receipt (electronic) \$0.00	
<input type="checkbox"/> Certified Mail Restricted Delivery \$0.00	
<input type="checkbox"/> Adult Signature Required \$0.00	
<input type="checkbox"/> Adult Signature Restricted Delivery \$0.00	
Postage \$0.58	
Total Postage and Fees \$4.33	
Sent To	
E06 Resources Inc.	
Street and Apt. No., or PO Box No.	
PO Box 4362	
City, State, ZIP+4®	
Houston, TX 77210-4362	
PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions	

7019 1640 0000 4703 8598

U.S. Postal Service™ CERTIFIED MAIL® RECEIPT Domestic Mail Only	
For delivery information, visit our website at <a href="http://www.usps.com">www.usps.com</a> ®.	
Carlsbad, NM 88220	
Certified Mail Fee \$3.75	0109 05
Extra Services & Fees (check box, add fee as appropriate)	Postmark Here
<input type="checkbox"/> Return Receipt (hardcopy) \$0.00	01/04/2022
<input type="checkbox"/> Return Receipt (electronic) \$0.00	
<input type="checkbox"/> Certified Mail Restricted Delivery \$0.00	
<input type="checkbox"/> Adult Signature Required \$0.00	
<input type="checkbox"/> Adult Signature Restricted Delivery \$0.00	
Postage \$0.58	
Total Postage and Fees \$4.33	
Sent To	
Eddy County Manager's Office	
Street and Apt. No., or PO Box No.	
101 W Greene Street Ste. 110	
City, State, ZIP+4®	
Carlsbad, NM 88220	
PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions	

7019 1640 0000 4703 8611

U.S. Postal Service™ CERTIFIED MAIL® RECEIPT Domestic Mail Only	
For delivery information, visit our website at <a href="http://www.usps.com">www.usps.com</a> ®.	
Artesia, NM 88210	
Certified Mail Fee \$3.75	0109 05
Extra Services & Fees (check box, add fee as appropriate)	Postmark Here
<input type="checkbox"/> Return Receipt (hardcopy) \$0.00	01/04/2022
<input type="checkbox"/> Return Receipt (electronic) \$0.00	
<input type="checkbox"/> Certified Mail Restricted Delivery \$0.00	
<input type="checkbox"/> Adult Signature Required \$0.00	
<input type="checkbox"/> Adult Signature Restricted Delivery \$0.00	
Postage \$0.58	
Total Postage and Fees \$4.33	
Sent To	
Artesia City Manager's Office	
Street and Apt. No., or PO Box No.	
511 W Texas Ave.	
City, State, ZIP+4®	
Artesia, NM 88210	
PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions	

7019 1640 0000 4703 8574

U.S. Postal Service™ CERTIFIED MAIL® RECEIPT Domestic Mail Only	
For delivery information, visit our website at <a href="http://www.usps.com">www.usps.com</a> ®.	
Artesia, NM 88210	
Certified Mail Fee \$3.75	0109 05
Extra Services & Fees (check box, add fee as appropriate)	Postmark Here
<input type="checkbox"/> Return Receipt (hardcopy) \$0.00	01/04/2022
<input type="checkbox"/> Return Receipt (electronic) \$0.00	
<input type="checkbox"/> Certified Mail Restricted Delivery \$0.00	
<input type="checkbox"/> Adult Signature Required \$0.00	
<input type="checkbox"/> Adult Signature Restricted Delivery \$0.00	
Postage \$0.58	
Total Postage and Fees \$4.33	
Sent To	
David and Diana Wilson	
Street and Apt. No., or PO Box No.	
361 W Kincaid Ranch Rd	
City, State, ZIP+4®	
Artesia, NM 88210	
PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions	

7019 1640 0000 4703 8536

U.S. Postal Service™ CERTIFIED MAIL® RECEIPT Domestic Mail Only	
For delivery information, visit our website at <a href="http://www.usps.com">www.usps.com</a> ®.	
Rockwall, TX 75087	
Certified Mail Fee \$3.75	0109 05
Extra Services & Fees (check box, add fee as appropriate)	Postmark Here
<input type="checkbox"/> Return Receipt (hardcopy) \$0.00	01/04/2022
<input type="checkbox"/> Return Receipt (electronic) \$0.00	
<input type="checkbox"/> Certified Mail Restricted Delivery \$0.00	
<input type="checkbox"/> Adult Signature Required \$0.00	
<input type="checkbox"/> Adult Signature Restricted Delivery \$0.00	
Postage \$0.58	
Total Postage and Fees \$4.33	
Sent To	
Agave Energy Company	
Street and Apt. No., or PO Box No.	
2424 Ridge Rd	
City, State, ZIP+4®	
Rockwall, TX 75087	
PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions	



7019 1640 0000 4703 8567

**U.S. Postal Service™**  
**CERTIFIED MAIL® RECEIPT**  
 Domestic Mail Only

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

Santa Fe, NM 87501

Certified Mail Fee \$3.75  
 \$0.00  
 Extra Services & Fees (check box, add fee as appropriate)  
☐ Return Receipt (hardcopy) \$0.00  
☐ Return Receipt (electronic) \$0.00  
☐ Certified Mail Restricted Delivery \$0.00  
☐ Adult Signature Required \$0.00  
☐ Adult Signature Restricted Delivery \$0.00

Postage \$0.58

Total Postage and Fees \$4.33



Sent To State of New Mexico  
 Street and Apt. No., or PO Box No. 310 Old Santa Fe Trail  
 City, State, ZIP+4® Santa Fe, NM 87501  
 PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7019 1640 0000 4703 8581

**U.S. Postal Service™**  
**CERTIFIED MAIL® RECEIPT**  
 Domestic Mail Only

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

El Paso, TX 79903

Certified Mail Fee \$3.75  
 \$0.00  
 Extra Services & Fees (check box, add fee as appropriate)  
☐ Return Receipt (hardcopy) \$0.00  
☐ Return Receipt (electronic) \$0.00  
☐ Certified Mail Restricted Delivery \$0.00  
☐ Adult Signature Required \$0.00  
☐ Adult Signature Restricted Delivery \$0.00

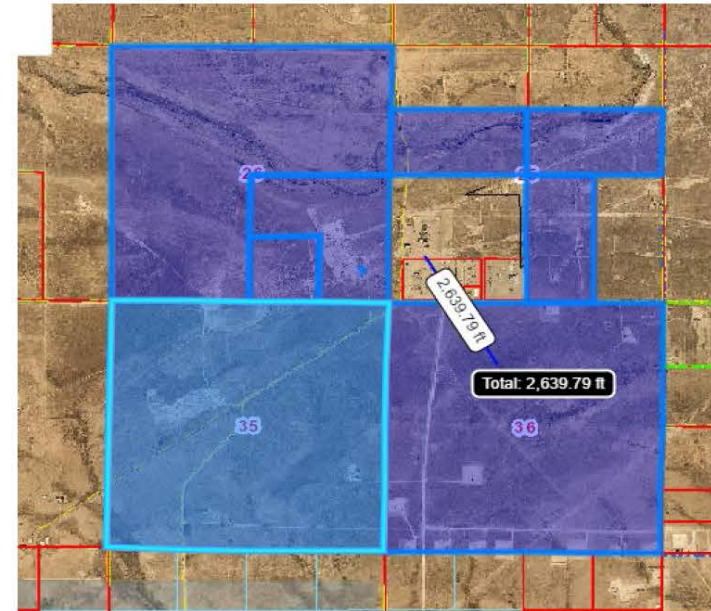
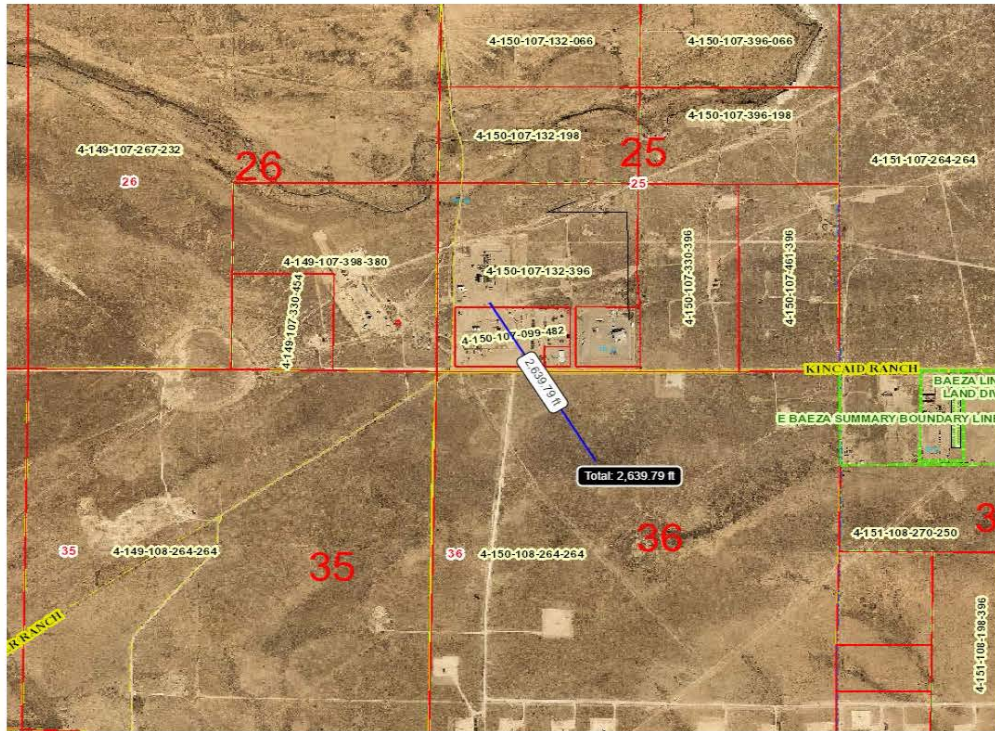
Postage \$0.58

Total Postage and Fees \$4.33



Sent To Hornbaker Estate  
 Street and Apt. No., or PO Box No. 401 Pershing Drive  
 City, State, ZIP+4® El Paso, TX 79903  
 PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions





☆ 4-150-107-132-198 > | ...

**Owner:**  
WILSON, WANDA FAYE ESTATE & WILSON, DAVID D &  
DIANA L (N-JT)  
**Owner Address:**  
361 W KINCAID RANCH ROAD  
ARTESIA NM 88210  
**Site Address:**  
N OF 294 PIPELINE ROAD

☆ 4-149-107-267-232 > | ...

**Owner:**  
WILSON, WANDA FAYE ESTATE & WILSON, DAVID D &  
DIANA L (N-JT)  
**Owner Address:**  
361 W KINCAID RANCH ROAD  
ARTESIA NM 88210  
**Site Address:**  
N OF 294 PIPELINE ROAD

☆ 4-150-107-396-198 > | ...

**Owner:**  
HORNBAKER, F D ESTATE ET ALS  
**Owner Address:**  
4101 PERSHING DRIVE  
EL PASO TX 79903  
**Site Address:**  
PIPELINE ROAD

☆ 4-149-108-264-264 > | ...

**Owner:**  
WILSON, WANDA FAYE ESTATE & WILSON, DAVID D &  
DIANA L (N-JT)  
**Owner Address:**  
361 W KINCAID RANCH ROAD  
ARTESIA NM 88210  
**Site Address:**  
361 W KINCAID RANCH ROAD

☆ 4-149-107-398-380 > | ...

**Owner:**  
AGAVE ENERGY COMPANY  
**Owner Address:**  
2424 RIDGE RD  
ROCKWALL TX 75087  
**Site Address:**  
293 PIPELINE ROAD

☆ 4-149-107-330-454 > | ...

**Owner:**  
EOG RESOURCES INC  
**Owner Address:**  
PO BOX 4362  
HOUSTON TX 772104362  
**Site Address:**  
W OF 293 PIPELINE ROAD

☆ 4-150-107-330-396 > | ...

**Owner:**  
AGAVE ENERGY COMPANY  
**Owner Address:**  
3100 MCKINNON ST STE 800  
DALLAS TX 752017014  
**Site Address:**  
PIPELINE ROAD

☆ 4-150-108-264-264 > | ...

**Owner:**  
STATE OF NEW MEXICO  
**Owner Address:**  
310 OLD SANTA FE TRAIL  
SANTA FE NM 87504  
**Site Address:**

**Section 9****Dagger Draw Gas Plant - Frontier Field Services, LLC****PROPERTY OWNERS**

PROPERTY OWNERS			
Account	OWNER NAME	ADDRESS	CITYSTATEZIP
R072812	AGAVE ENERGY COMPANY	2424 RIDGE RD	ROCKWALL, TX 75087
R072811	EOG RESOURCES INC	PO BOX 4362	HOUSTON, TX 77210-4362
R040375	AGAVE ENERGY COMPANY	3100 MCKINNON ST STE 800	DALLAS, TX 75201-7014
R066573	STATE OF NEW MEXICO	310 OLD SANTA FE TRAIL	SANTA FE, NM 87504
R040651	WILSON, DAVID D & DIANA L ET AL (N-JT	361 W KINCAID RANCH RD	ARTESIA, NM 88210
R040653	WILSON, DAVID D & DIANA L ET AL (N-JT)	361 W KINCAID RANCH RD	ARTESIA, NM 88210
R040574	HORNBAKER, F D ESTATE ET ALS	4101 PERSHING DRIVE	EL PASO, TX 79903
R040657	WILSON, DAVID D & DIANA L ET AL (N-JT)	361 W KINCAID RANCH RD	ARTESIA, NM 88210

Section 9

Dagger Draw Gas Plant - Frontier Field Services, LLC

TRIBES, COUNTIES & MUNICIPALITIES WITHIN 10 MILE RADIUS

TRIBES					
N/A					
COUNTIES					
EDDY COUNTY	COUNTY MANAGER	101 W GREENE STREET Suite 110	CARLSBAD	NM	88220
MUNICIPALITIES					
ARTESIA	CITY MANAGER	511 W TEXAS AVE	ARTESIA	NM	88210

TO WHOM IT MAY CONCERN:

**Frontier Field Services, LLC** announces its application to the New Mexico Environment Department for an air quality permit for the **modification** of its **Dagger Draw Gas Plant** facility. The expected date of application submittal to the Air Quality Bureau is **January 7, 2022**.

The exact location for the proposed facility known as, **Dagger Draw Gas Plant**, is at **278 Pipeline Rd, Artesia, NM 88210**. **Facility location:** latitude 32°42'53" and longitude -104°26'45". The approximate location of this facility is **9.2 miles southwest** of **Artesia** in **Eddy** county.

The proposed **significant revision** consists of modifying current sources and updating unit nomenclature, installation of an additional Amine unit, installation of six (6) compressor engines, and modifications of emission sources.

The estimated maximum quantities of any regulated air contaminant will be as follows in pound per hour (pph) and tons per year (tpy) and could change slightly during the course of the Department's review:

Pollutant:	Pounds per hour	Tons per year
Particulate Matter (PM)	2 pph	9 tpy
PM <sub>10</sub>	2 pph	9 tpy
PM <sub>2.5</sub>	2 pph	9 tpy
Sulfur Dioxide (SO <sub>2</sub> )	1 pph	1 tpy
Nitrogen Oxides (NO <sub>x</sub> )	24 pph	98 tpy
Carbon Monoxide (CO)	23 pph	98 tpy
Volatile Organic Compounds (VOC)	15 pph	87 tpy
Total sum of all Hazardous Air Pollutants (HAPs)	4 pph	17 tpy
Green House Gas Emissions as Total CO <sub>2</sub> e	n/a	1,120 tpy

The standard operating schedule of the facility will be 24 hours a day, 7 days a week and a maximum of 52 weeks per year. The maximum operating schedule will be 24 hours a day, 7 days a week and a maximum of 52 weeks per year.

Owners and operators of the facility include: Frontier Field Services, LLC; 1001 Conoco Road, Maljamar, NM 88264

If you have any comments about the construction or operation of this facility, and you want your comments to be made as part of the permit review process, you must submit your comments in writing to this address: Permit Programs Manager; New Mexico Environment Department; Air Quality Bureau; 525 Camino de los Marquez, Suite 1; Santa Fe, New Mexico; 87505-1816; (505) 476-4300; 1 800 224-7009; [https://www.env.nm.gov/aqb/permit/aqb\\_draft\\_permits.html](https://www.env.nm.gov/aqb/permit/aqb_draft_permits.html). Other comments and questions may be submitted verbally.

Please refer to the company name and facility name, or send a copy of this notice along with your comments, since the Department may have not yet received the permit application. Please include a legible return mailing address with your comments. Once the Department has performed a preliminary review of the application and its air quality impacts, the Department's notice will be published in the legal section of a newspaper circulated near the facility location.

**Atención**

Este es un aviso de la oficina de Calidad del Aire del Departamento del Medio Ambiente de Nuevo México, acerca de las emisiones producidas por un establecimiento en esta área. Si usted desea información en español, por favor comuníquese con esa oficina al teléfono 505-476-5557.

Sincerely,

**Frontier Field Services, LLC**  
**1001 Conoco Road, Maljamar, NM 88264**

**Notice of Non-Discrimination**

NMED does not discriminate on the basis of race, color, national origin, disability, age or sex in the administration of its programs or activities, as required by applicable laws and regulations. NMED is responsible for coordination of compliance efforts and receipt of inquiries concerning non-discrimination requirements implemented by 40 C.F.R. Part 7, including Title VI of the Civil Rights Act of 1964, as amended; Section 504 of the Rehabilitation Act of 1973; the Age Discrimination Act of 1975, Title IX of the Education Amendments of 1972, and Section 13 of the Federal Water Pollution Control Act Amendments of 1972. If you have any questions about this notice or any of NMED's non-discrimination programs, policies or procedures, or if you believe that you have been discriminated against with respect to a NMED program or activity, you may contact: Kathryn Becker, Non-Discrimination Coordinator, NMED, 1190 St. Francis Dr., Suite N4050, P.O. Box 5469, Santa Fe, NM 87502, (505) 827-2855, [nd.coordinator@state.nm.us](mailto:nd.coordinator@state.nm.us). You may also visit our website at <https://www.env.nm.gov/non-employee-discrimination-complaint-page/> to learn how and where to file a complaint of discrimination.

# NOTICE

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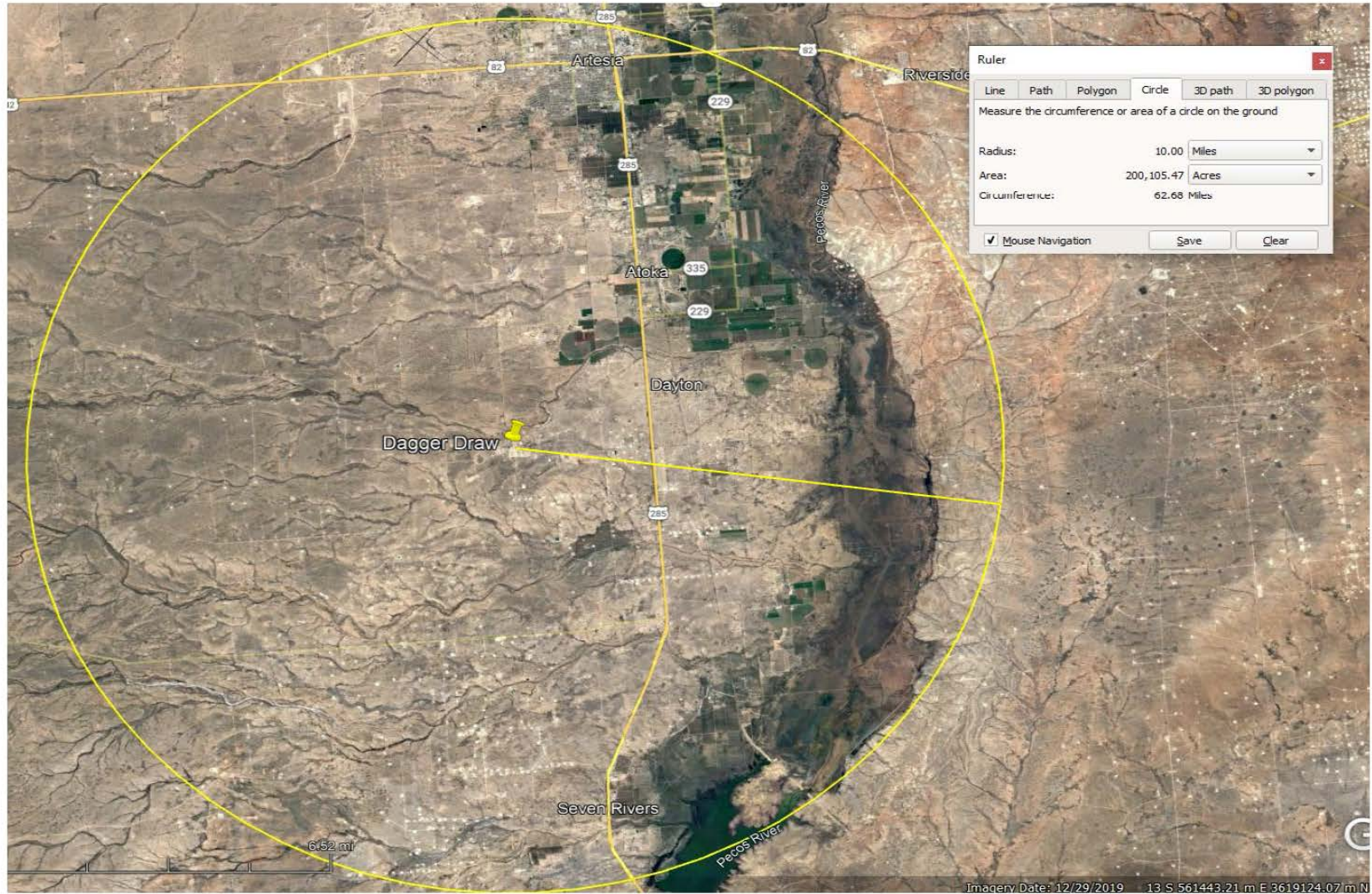
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**NOTICE**

Dagger Draw Gas Plant is located on the corner of Highway 160 and Highway 161 in the town of Durango, Colorado. The plant is owned and operated by Durango Midstream LLC. The plant is currently under construction and is expected to be completed in the fall of 2021. The plant will be used to process gas from the Durango area and will be a significant addition to the local economy. The plant will also create jobs for local residents. The plant is located on a public road and is accessible to all. The plant is a safe and secure facility and will be operated in accordance with all applicable laws and regulations. The plant is a valuable asset to the community and will be a source of pride for all Durango residents.

**NOTICE**

Dagger Draw Gas Plant is located on the corner of Highway 160 and Highway 161 in the town of Durango, Colorado. The plant is owned and operated by Durango Midstream LLC. The plant is currently under construction and is expected to be completed in the fall of 2021. The plant will be used to process gas from the Durango area and will be a significant addition to the local economy. The plant will also create jobs for local residents. The plant is located on a public road and is accessible to all. The plant is a safe and secure facility and will be operated in accordance with all applicable laws and regulations. The plant is a valuable asset to the community and will be a source of pride for all Durango residents.

**TRAINED IN COPD SAFE PRACTICES**

**CORONA BROS**

Public Notice  
Dec 27 2021, 13:44:29 MST

Public Notice  
Dec 27 2021, 13:44:29 MST



#2

N

0

NE

30

E

60

SE

120

S

150

180

☉ 91°E (M) ● 32°50'36.51", -104°24'4.44" ±13ft ▲ 3387ft

ICACIÓN

NOTICE

NOTICE

NOTICE

NOTICE

NOTICE

NOTICE

Dagger Draw Gas Plant  
Durango Midstream LLC

Public Notice  
Dec 27 2021, 13:38:53 MST



#3

E

SE

S

SW

90

120

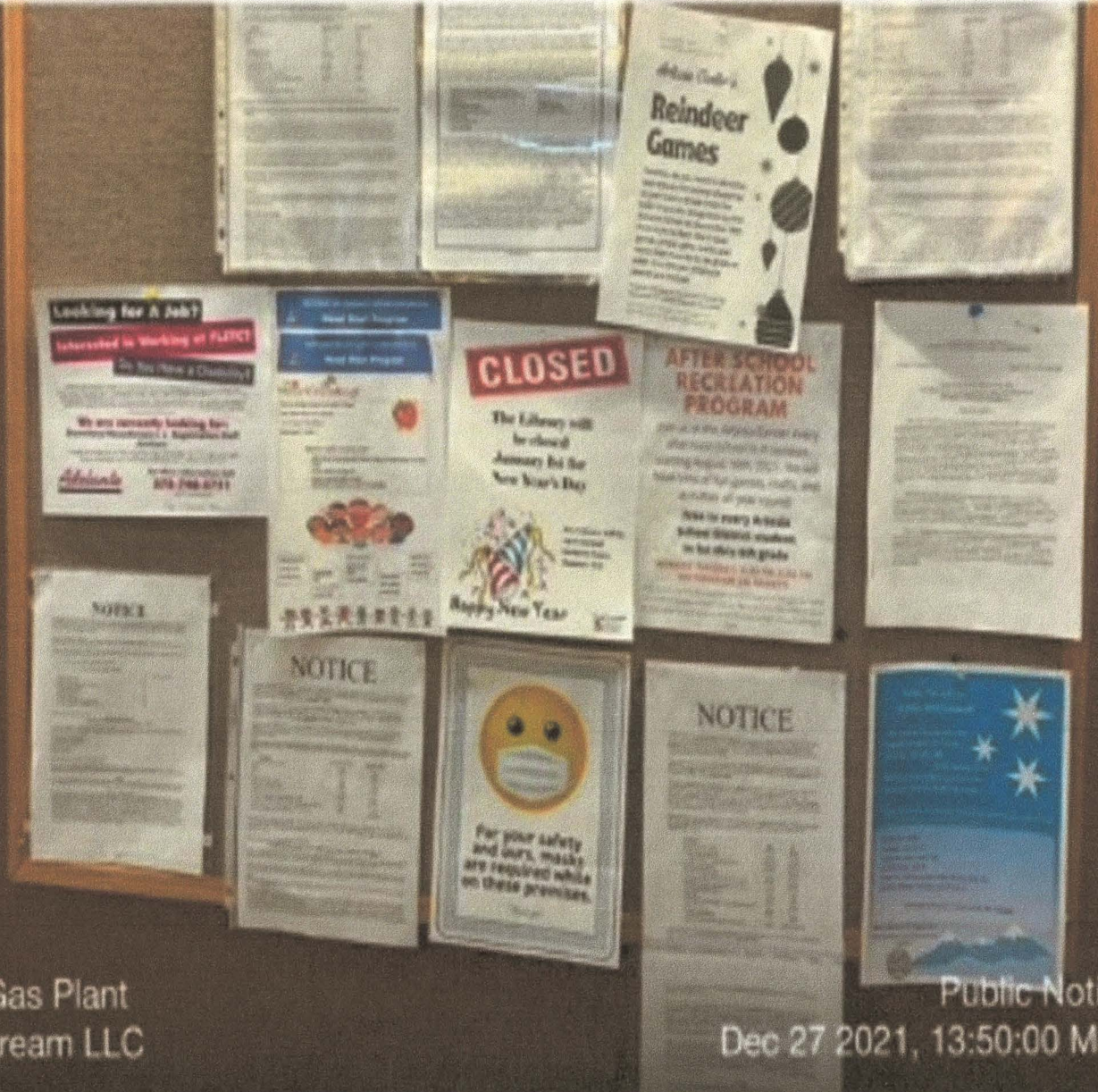
150

180

210

240

☉ 165°S (M) ● 32°50'27.32", -104°23'55.55" ±242ft ▲ 3380ft

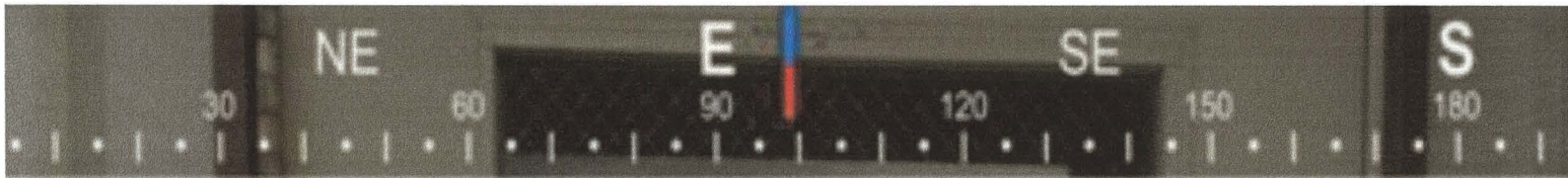


Dagger Draw Gas Plant  
Durango Midstream LLC

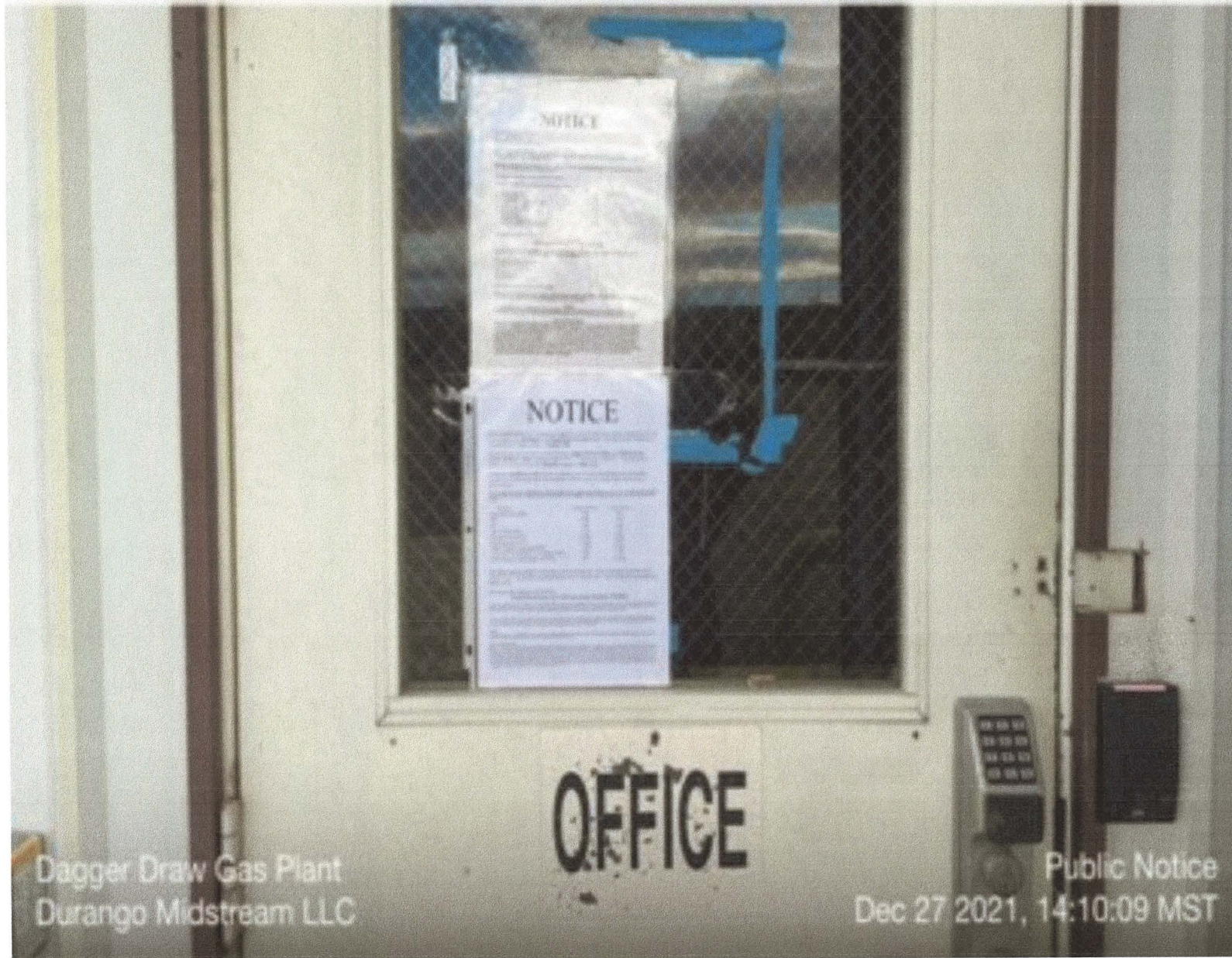
Public Notice  
Dec 27 2021, 13:50:00 MST



#4



☉ 99°E (M) ● 32°42'53.53", -104°26'45.10" ±9ft ▲ 3466ft



Dagger Draw Gas Plant  
Durango Midstream LLC

OFFICE

Public Notice  
Dec 27 2021, 14:10:09 MST



# NOTICE

**Frontier Field Services, LLC** announces its application to the New Mexico Environment Department for an air quality permit for the **modification** of its **Dagger Draw Gas Plant** facility. The expected date of application submittal to the Air Quality Bureau is **January 7, 2022**.

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PM <sub>2.5</sub>	2 pph	9 tpy
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Total sum of all Hazardous Air Pollutants (HAPs)	4 pph	17 tpy
Green House Gas Emissions as Total CO <sub>2</sub> e	n/a	1,120 tpy

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**Frontier Field Services, LLC; 1001 Conoco Road, Maljamar, NM 88264**

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#### Notice of Non-Discrimination

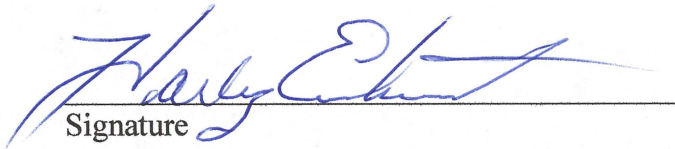
NMED does not discriminate on the basis of race, color, national origin, disability, age or sex in the administration of its programs or activities, as required by applicable laws and regulations. NMED is responsible for coordination of compliance efforts and receipt of inquiries concerning non-discrimination requirements implemented by 40 C.F.R. Part 7, including Title VI of the Civil Rights Act of 1964, as amended; Section 504 of the Rehabilitation Act of 1973; the Age Discrimination Act of 1975, Title IX of the Education Amendments of 1972, and Section 13 of the Federal Water Pollution Control Act Amendments of 1972. If you have any questions about this notice or any of NMED's non-discrimination programs, policies or procedures, or if you believe that you have been discriminated against with respect to a NMED program or activity, you may contact: Kathryn Becker, Non-Discrimination Coordinator, NMED, 1190 St. Francis Dr., Suite N4050, P.O. Box 5469, Santa Fe, NM 87502, (505) 827-2855, [nd.coordinator@state.nm.us](mailto:nd.coordinator@state.nm.us). You may also visit our website at <https://www.env.nm.gov/non-employee-discrimination-complaint-page/> to learn how and where to file a complaint of discrimination.

## General Posting of Notices – Certification

I, Harley Everhart EHS Compliance, the undersigned, certify that on **Monday, December 27, 2021**, posted a true and correct copy of the attached Public Notice in the following publicly accessible and conspicuous places in the **Artesia of Eddy County, State of New Mexico** on the following dates:

1. Chamber of Commerce;                      Monday, December 27, 2021
2. Artesia, Post Office;                      Monday, December 27, 2021
3. Artesia Public Library;                      Monday, December 27, 2021
4. Dagger Draw Gas Facility;                      Monday, December 27, 2021

Signed this 27<sup>th</sup> day of December; 2021,

  
Signature

Monday, December 27, 2021  
Date

Harley Everhart  
Printed Name

EHS Compliance Coordinator  
Title {APPLICANT OR RELATIONSHIP TO APPLICANT}

**From:** [Xavier Chavez](#)  
**To:** [don@carlsbadradio.com](mailto:don@carlsbadradio.com)  
**Cc:** [Adam Erenstein](#)  
**Subject:** Dagger Draw Gas Plant Public Service Announcement  
**Date:** Monday, January 10, 2022 1:02:51 PM  
**Attachments:** [image001.png](#)

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Dear Radio 92.1 KATK-FM,

Per New Mexico Administrative Code 20.2.72.203.B NMAC and according to the Guidance for Public Notice for Air Quality Permit Applications - **(5) Notifications: Submittal of Public Service Announcement (PSA):** A public service announcement required for permits or significant permit revisions must be submitted to at least one radio or television station, which services the municipality, or county which the facility is or will be located. **Therefore, based on the above, we respectfully ask you to air the information shown below as a Public Service Announcement.**

The public service announcement request must contain the following information about the facility or proposed facility (20.2.72.203.D NMAC).

- a. The name: **Dagger Draw Gas Plant – Frontier Field Services, LLC**, location: **278 Pipeline Rd, Artesia, NM 88210** and type of business: **Gas Plant.**
- b. The name and principal owner or operator: **Frontier Field Services, LLC** – owner and operator.
- c. The type of process or change for which the permit is sought: **NSR Significant Revision – installation/modification of new/existing equipment.**
- d. Locations where the notices have been posted in Artesia, NM 88210: **(1) Dagger Draw Gas Plant – Facility Entrance (2) US Postal Office: Artesia Post Office – 201 N 4<sup>th</sup> Street (3) Artesia Chamber of Commerce – 107 N 1<sup>st</sup> Street (4) Artesia Public Library – 205 W Quay Ave.**
- e. The Department's address or telephone number to which comments may be directed: **Permit Programs Manager; New Mexico Environment Department; Air Quality Bureau; 525 Camino de los Marquez, Suite 1, Santa Fe, New Mexico; 87505-1816; (505) 476-4300; 1 (800) 224-7009.**

Best Regards,

**Xavier Chavez, M.S**  
Associate Consultant

M 505.440.3715  
9400 Holly Avenue NE, Building 3, Suite 300, Albuquerque, NM 87122  
Email: [xavier.chavez@trinityconsultants.com](mailto:xavier.chavez@trinityconsultants.com)



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Stay current on environmental issues. [Subscribe](#) today to receive Trinity's free *EHS Quarterly*.

## Submittal of Public Service Announcement – Certification

I, Xavier Chavez the undersigned, certify that on **January 10<sup>th</sup>, 2022**, submitted a public service announcement to **RADIO KATK-FM** that serves the City of **Artesia, Eddy County, New Mexico**, in which the source is or is proposed to be located and that **RADIO KATK-FM DID NOT RESPOND THAT IT WOULD NOT AIR THE ANNOUNCEMENT.**

Signed this 10th day of January, 2022,

  
Signature

January 10, 2022  
Date

Xavier Chavez  
Printed Name

Trinity Consultants, Inc.  
Title {APPLICANT OR RELATIONSHIP TO APPLICANT}



# Religion

## Opening the gift

### Pastor's Corner



By Rick Smith

“Jesus is the reason for the season.” How many of you have heard that saying?

It is very true in one sense, but we are the reason that Jesus came. The gospel in a nutshell is John 3:16, which says, “For God so loved the world that he gave his only begotten Son, that whosoever believeth in him should not perish, but have everlasting life.” The greatest gift that was ever given was given so that, if we would receive Him by faith, we can have everlasting life.

If anyone would receive Jesus, “...to them gave he power to become the sons of God, even to them that believe on his name: Which were born, not of blood, nor of the will of the flesh, nor of the will of man, but of God (John 1:12-13).” Jesus is the gift of God – the Lamb of God that takes away the sin of the world (John 1:29). Let’s spend a little time unwrapping the Gift of God.

This Gift is proof that God loves us. “In this was manifested the love of God toward us, because that God sent his only begotten Son into the world, that we might live through him (1 John 4:9).” The proof that God loves us is the Gift of His Son. If the church could save you, then we wouldn’t need the Gift of God’s Son. If being good would save you, then we wouldn’t need Jesus.

We all know that we are not right with God. We have offended Him by our sins. And I think we know that there are consequences for our sin. In this, the Bible agrees. “For the wages of sin is death; but the gift of God is eternal life through Jesus Christ our Lord (Romans 6:23).” God sent his only begotten Son into the world that we might live through Him. What a wonderful Gift!

God does not love us because we love Him. God loves even those who hate Him and wants them to come to faith in Jesus. “Herein is love, not that we loved God, but that he loved us, and sent his Son to be the propitiation for our sins (1 John 4:10).” “Propitiation” is a big word that means “blood covering” that reconciles us to God.

God sent His Son to shed His blood on the cross to be the blood covering for our sins. Christians often talk about their sin being under the blood. Our sin is covered and paid for by Jesus’ blood being shed for us. Jesus is the Mediator between us and God. Jesus shed His blood for us to bring us home to God. What a wonderful Gift is Jesus our Lord and Savior, our Priest and King.

The Bible is clear about Jesus. “And this is the record, that God hath given to us eternal life, and this life is in his Son. He that hath the Son hath life; and he that hath not the Son of God hath not life (1 John 5:11-12).” Everyone wants eternal life. They don’t just want to exist forever but to live forever. Those in hell will exist forever, but I wouldn’t call it living.

Just as life didn’t originate with us but from God, eternal life comes from God, and that life is in His Son Jesus. If you have the Son of God, then you have life. You see, it is Christ in you that is the hope of glory (Colossians 1:27). The only hope of going to heaven and living eternally is to have Jesus Christ the Lord.

The saddest thing that the Bible makes clear is that, if you don’t have Jesus, you don’t have life. “He that believeth on him is not condemned; but he that believeth not is condemned already, because he hath not believed in the name of the only begotten Son of God (John 3:18).” You have to receive the gift, not the package.

Rip the paper off, throw away the ribbons and the box. Receive the Gift. You need Jesus. Apart from Him, you are lost. Don’t go for a cheap imitation. Put your faith in Jesus Christ the Son of God, Who died and rose again to save you from sin, death and hell. Receive Jesus, the Gift of God and eternal life. I pray that you will.

If you have any questions, we invite you to visit with us this Sunday. Bible study is at 9:45 a.m. and worship at 10:50 a.m. We are located at 711 W. Washington Ave.

**(EDITOR’S NOTE: Rick Smith is the pastor of Calvary Baptist Church.)**

## Fugitive

(Continued from Page 5)

Elliott traveled across the U.S. looking for Conrad and even after retiring would check on the case, said his son, Pete Elliott, now the top U.S. marshal in Cleveland, who inherited the hunt for Conrad nearly 20 years ago.

His father died in March 2020 before investigators pieced together details from Randeale’s obituary and signatures from his past. Then in November, Randeale’s family confirmed that just before he died, he told them what he had done, Elliott said.

Why Conrad committed the robbery has been analyzed endlessly. “It wasn’t about the money. He always wanted to impress people,” said Metcalf, his high school pal.

Investigators believe he was inspired by the 1968 movie “The Thomas Crown Affair,” about a bank executive who got away with \$2.6 million and turned the heist into a game.

After the real-life robbery in Cleveland, Conrad wound up in the Boston area, where much of the movie was filmed.

Thomas Randeale came into existence in January 1970 when Conrad applied for a Social Security number in Boston, Elliott said.

During the 1970s, Randeale worked at a country club outside Boston and became its manager. He also met his future wife not long after arriving in Boston. They were married in 1982.

Around then, he began working in the car business, selling Land Rovers and Volvos until he retired after nearly 40 years.

What’s not clear yet is what happened to the money. The Marshals Service is looking into whether he lost it early through bad investments.

While Randeale and his wife, Kathy, lived most of their years in a pleasant Boston suburb, they filed for bankruptcy protection in 2014. She told Cleveland.com in November that her husband was a great man. She has declined interview requests.

No one would have guessed that Randeale, who was 71 when he died, was someone trying to hide from authorities.

Among the many people he became friends with over the years was an FBI agent in Boston, Elliott said.

“He was just a gentle soul, you know, very polite, very well spoken,” said Jerry Healy, who first met Randeale at a Woburn, Massachusetts, dealership where they talked daily for years.

Matt Kaplan, who managed two dealerships where Randeale worked and golfed with him for many years, called him a gentleman.

“The only way it makes sense is that at that age he was just a kid, and it was a challenge kind of thing,” Kaplan said.

“If he would have told us way back when, I don’t think we would have believed him because he wasn’t that kind of guy,” he said. “The man was different than the kid.”

In the early days after Randeale’s identity was revealed, his friends couldn’t believe it. But now looking back, some things make sense. How he always had a beard. His reluctance to talk about where he grew up or his extended family.

“You know all the years I knew Tommy, I never heard him mention a sister or a mother or a brother or a father,” Healy said.

“You could never pry anything from him,” said Brad Anthony, another close friend.

Still, he said it’s almost impossible to believe. “It just seems so out of character for the Tom I knew,” he said.

# Some thoughts before our last goodbye to 2021

### Pastor's Corner



By David Grousnick

Next Monday begins a New Year, and I can feel the anticipation -- or dread, depending on your point of view.

I heard one guy say he already dreads the New Year. He said, “The holidays aren’t quite over and already I’m about 90 days ahead on my calories and 90 days behind on my bills.” Some of us can identify with him.

Some of us make resolutions like one man named George whom I heard about recently. He said to a friend, “There’s nothing like getting up at 6 in the morning, going for a run around the park, and taking a brisk shower before breakfast.”

His friend Bob asked, “How long have you been doing this?”

George said, “I start tomorrow.”

But before we say our last goodbye to 2021, can we pause together for just one more moment?

Since before Thanksgiving, as usual, the shopping malls have been telling us that “it’s the most wonderful time of the year.” And it is -- for them. For many others, however, it is a mixed bag.

Christmas isn’t what it was when I was a child and never will be again. I’m an adult; it’s different. It just is.

In this economically difficult time, many have lost jobs, quit jobs or changed jobs, or seen their investments and securities dwindle. They are unsure of what the future holds.

Perhaps we have not been able to do what we might have

liked to have done for Christmas. Many husbands and wives, sons and daughters, fathers and mothers, are serving in harm’s way and are not able to be with family this Christmas.

There are those living with illness or with grief at the death of a loved one during another pandemic year -- sorrow intensified during this season of memories of Christmases past and high, perhaps unrealistic, expectations of what Christmas is supposed to be.

There might be those of us who are just as happy to have the celebration done with and over.

I invite you to consider some thoughts from Wm. McCord “Mac” Thigpen as we bring this year to a close.

“In this season of gift giving and all that pulls and tugs on our hearts, may we remember the good gifts that the Creator has given us, the sun and the moon, this good earth with all its blessings of sky and water, plants and animals, this incredible gift of life, of flesh and blood, of breath and memory,

## A cup and a baptism - sacrifices and gifts

By REV. CINDY LOSE  
St. Paul's Episcopal Church

Hebrews says the priest is chosen from among mortals to:

- offer gifts and sacrifices for sins
- deal gently with the ignorant and wayward
- take this honor when called by God

Jesus, the high priest, was chosen by God to:

- offer the gifts of mercy and forgiveness and to sacrifice his life for our sins.
- deal gently with the ignorant disciples and the human race with its faults and foibles.
- say yes to the Father when asked for the ultimate sacrifice.

We, as believers, are chosen by God from among mortals to:

- offer praise for blessings and thanksgiving forgiveness of faults and foibles.
- deal gently with the ignorant around us (whether family, friends, or those in positions of public trust) and with those less fortunate -- whether homeless, faithless or underserved.
- say yes to the Father when presented with situations in which we can serve others.

Two disciples come forward in arrogance or ignorance (sort of ignorant and wayward) and ask Jesus to place them on either side of him when he comes into glory -- when his reign comes about.

Jesus doesn’t say, “What are you thinking? No way, Jose!” No, he deals gently with these ignorant men and explains what they will have to do to perhaps achieve this goal. He begins to talk about a cup and a baptism, sacrifices and gifts, as the priest according to the order of Melchizedek is instructed to do.

The Cup: In Hebrew writings, the cup is whatever it is that God gives you -- status, no status, personal influence rather than positional influence. The road to crucifixion was given to Jesus; the cup is the sacrifice. For us, the cup is a symbol of the Eucharist, the gift of the bread and wine that offers us strength.

Baptism: A gift of cleansing from God; a rebirth. Jesus’ baptism marked his rebirth, his new birth, from a lad in Galilee to the public ministry that proclaimed the good news of God. Our baptism was the public declaration of our entrance into the fellowship of all believers, proclaiming that we are now followers of God, bringers of peace and healing, caretakers of the ignorant and wayward.

How similar is all this to our relationship with God? We come to him with lots of requests: some born of pride, some for power, some out of sheer fear and ignorance. And how does God respond? My experience has been that I hear a still, small voice ask, “What is it you want me to do for you?” I don’t hear “what are you thinking?” or “no way, Jose.” I hear, “I know the plans I have for you -- plans to give you hope and a future.”

And then, I look for the sacrifice and gift. I have the gifts of love of God and the indwelling of the Holy Spirit. The gift of hope that “all things are possible with God.” And what is the sacrifice? Time, talent, dealing with the ignorant and wayward? Giving of self, rather than getting for self.

Jesus tells us and the disciples that whoever wishes to be first among you must be “slave of all.” Slave in Hebrew times meant servitude, not necessarily back-breaking, back-whipping forced hard labor. One served -- waited on, did for others -- as Jesus served his followers by providing instruction, food, feet washing, healing.

WE must be servants. As the Son of Man came NOT to be served but TO serve. THAT is our cup from which to drink.

What if all of Christ’s followers were servants to others? Wow! We’d be helping and supporting and providing and sharing and bringing forth the kingdom of God. Isn’t that kingdom among us now? Sometimes, I think. I experience it sometimes. Our baptismal covenant reminds us to “seek and serve Christ in all persons, loving your neighbor as yourself.” Servanthood. It charges us with the task, the sacrifice, of striving for justice and peace among all people and respecting the dignity of every human being.

Isn’t that what Christ did? His cup -- his purpose as a chosen one from God. Isn’t that what he instructed James and John to do? Their cup -- to be a servant. Isn’t this our gift and sacrifice? To use the talents and gifts given us to serve others, to strive for justice, and to respect everyone’s dignity.

When we accept that we are servants of God and others, when we choose to follow the path that Jesus has laid out for us, when we bring our ignorance and waywardness to God, THEN we will fulfill our roles as priest according to the order of Melchizedek.

member the gift of the Word made flesh sent to save us, to heal us, to bring us joy, and to bring us back to God’s own self.”

We invite you to come and join us for worship at First Christian Church. Seek us out Sunday mornings at 11th Street and Bullock Avenue, across the street from Zia Intermediate School. We start at 10:30 a.m. Dress is casual. Hope to see you soon!

Happy New Year!

**(EDITOR’S NOTE: David Grousnick is the pastor of First Christian Church.)**

#### NOTICE OF AIR QUALITY PERMIT APPLICATION

Frontier Field Services, LLC announces its application to the New Mexico Environment Department for an air quality permit for the modification of its Dagger Draw Gas Plant facility. The expected date of application submittal to the Air Quality Bureau is January 7, 2022.

The exact location for the proposed facility known as, Dagger Draw Gas Plant, is at 278 Pipeline Rd, Artesia, NM 88210. Facility location: latitude 32°42'53" and longitude -104°26'45". The approximate location of this facility is 9.2 miles southwest of Artesia in Eddy county.

The proposed significant revision consists of modifying current sources and updating unit nomenclature, installation of an additional Amine unit, installation of six (6) compressor engines, and modifications of emission sources. The estimated maximum quantities of any regulated air contaminant will be as follows in pound per hour (pph) and tons per year (tpy) and could change slightly during the course of the Department's review:

Pollutant:	Pounds per hour	Tons per year
Particulate Matter (PM)	2 pph	9 tpy
PM 10	2 pph	9 tpy
PM 2.5	2 pph	9 tpy
Sulfur Dioxide (SO2)	1 pph	1 tpy
Nitrogen Oxides (NOx)	24 pph	98 tpy
Carbon Monoxide (CO)	23 pph	98 tpy
Volatile Organic Compounds (VOC)	15 pph	87 tpy
Total sum of all Hazardous Air Pollutants (HAPs)	4 pph	17 tpy
Toxic Air Pollutant (TAP)	n/a	1,120 tpy
Green House Gas Emissions as Total CO2e	2 pph	9 tpy

The standard operating schedule of the facility will be 24 hours a day, 7 days a week and a maximum of 52 weeks per year. The maximum operating schedule will be 24 hours a day, 7 days a week and a maximum of 52 weeks per year.

The owner and/or operator of the Facility is: Frontier Field Services, LLC; 1001 Conoco Road, Maljamar, NM 88264

If you have any comments about the construction or operation of this facility, and you want your comments to be made as part of the permit review process, you must submit your comments in writing to this address: Permit Programs Manager; New Mexico Environment Department; Air Quality Bureau; 525 Camino de los Marquez, Suite 1; Santa Fe, New Mexico; 87505-1816; (505) 476-4300; 1 800 224-7009; [https://www.env.nm.gov/aqb/permit/aqb\\_draft\\_permits.html](https://www.env.nm.gov/aqb/permit/aqb_draft_permits.html). Other comments and questions may be submitted verbally.

Please refer to the company name and site name, or send a copy of this notice along with your comments, since the Department may have not yet received the permit application. Please include a legible return mailing address with your comments. Once the Department has performed a preliminary review of the application and its air quality impacts, the Department's notice will be published in the legal section of a newspaper circulated near the facility location.

General information about air quality and the permitting process can be found at the Air Quality Bureau's web site. The regulation dealing with public participation in the permit review process is 20.2.72.206 NMAC. This regulation can be found in the "Permits" section of this web site.

#### Atención

Este es un aviso de la oficina de Calidad del Aire del Departamento del Medio Ambiente de Nuevo México, acerca de las emisiones producidas por un establecimiento en esta área. Si usted desea información en español, por favor comuníquese con esa oficina al teléfono 505-476-5557.

#### Notice of Non-Discrimination

NMED does not discriminate on the basis of race, color, national origin, disability, age or sex in the administration of its programs or activities, as required by applicable laws and regulations. NMED is responsible for coordination of compliance efforts and receipt of inquiries concerning non-discrimination requirements implemented by 40 C.F.R. Part 7, including Title VI of the Civil Rights Act of 1964, as amended; Section 504 of the Rehabilitation Act of 1973; the Age Discrimination Act of 1975, Title IX of the Education Amendments of 1972, and Section 13 of the Federal Water Pollution Control Act Amendments of 1972. If you have any questions about this notice or any of NMED's non-discrimination programs, policies or procedures, or if you believe that you have been discriminated against with respect to a NMED program or activity, you may contact: Kathryn Becker, Non-Discrimination Coordinator, NMED, 1190 St. Francis Dr., Suite N4050, P.O. Box 5469, Santa Fe, NM 87502, (505) 827-2855, [nd.coordinator@state.nm.us](mailto:nd.coordinator@state.nm.us). You may also visit our website at <https://www.env.nm.gov/non-employment-discrimination-complaint-page/> to learn how and where to file a complaint of discrimination.



CROSSWORD

By THOMAS JOSEPH

ACROSS

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6 "Paradise Lost" figure  
11 Of service  
12 Banish  
13 Submerged  
14 Puzzled  
15 Looked lasciviously  
17 Pole worker  
19 Bear's lair  
20 Capt.'s superior  
23 Bonehead  
25 Flank  
26 Deli staples  
28 Annual race, for short  
29 Army exercises  
30 Snaky shape  
31 Sheltered side  
32 Spot  
33 Volcanic rock  
35 Yellow gem  
38 Like Santa's suit  
41 In the know  
42 Bert's buddy

- 44 Oozes  
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1 Soaking spot  
2 Salt Lake City player  
3 Wallets  
4 Baby wipe additive  
5 Clinched  
6 Common dice roll  
7 Cut drastically  
8 Box office buys, in slang  
9 Brewpub offering  
10 Homer's neighbor  
16 Dwells

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12-30

Legal Notice

STATE OF NEW MEXICO  
COUNTY OF EDDY  
FIFTH JUDICIAL DISTRICT COURT

No. D-503-CV-2021-00150

NEW REZ LLC D/B/A SHELLPOINT MORTGAGE SERVICE, INC.,

Plaintiff,

vs.

AMY CHRISTIANSEN AND ANNA ARREDONDO,

Defendants.

NOTICE OF SALE

NOTICE IS HEREBY GIVEN that on February 22, 2022, at the hour of 1:00 PM, the undersigned Special Master, or his designee, will, at the front entrance of the Eddy County Courthouse, at 102 North Canal, Carlsbad, NM 88220, sell all of the rights, title, and interests of the above-named Defendant(s), in and to the hereinafter described real property to the highest bidder for cash. The property to be sold is located at 71 Heath St, Artesia, New Mexico 88210, and is more particularly described as follows:

Lot 24 in Block 5 of SHERRELL ACRES, a subdivision in the NW1/4 and N1/2SW1/4 of Section 32, Township 17 South, Range 26 East, N.M.P.M., Eddy County, New Mexico, as the same appears on the official, filed plat thereof on file in the Office of the County Clerk of Eddy County, New Mexico.

including a 1998 Crestridge, Vehicle Identification No. CRH1TX8580AB, (hereinafter the "Property"). If there is a conflict between the legal description and the street address, the legal description shall control.

The foregoing sale will be made to satisfy a foreclosure judgment rendered by this Court in the above-entitled and numbered cause on November 19, 2021, being an action to foreclose a mortgage on the Property. Plaintiff's judgment is in the amount of \$120,724.87, and the same bears interest at the rate of 5.25% per annum, accruing at the rate of \$17.36 per diem. The Court reserves entry of final judgment against Defendants, Amy Christiansen and Anna Arredondo, for the amount due after foreclosure sale, including interest, costs, and fees as may be assessed by the Court. Plaintiff has the right to bid at the foregoing sale in an amount equal to its judgment, and to submit its bid either verbally or in writing. Plaintiff may apply all or any part of its judgment to the purchase price in lieu of cash.

In accordance with the Court's decree, the proceeds of sale are to be applied first to the costs of sale, including the Special Master's fees, and then to satisfy the above-described judgment, including interest, with any remaining balance to be paid unto the registry of the Court in order to satisfy any future adjudication of priority lienholders.

NOTICE IS FURTHER GIVEN that in the event that the Property is not sooner redeemed, the undersigned Special Master will, as set forth above, offer for sale and sell the Property to the highest bidder for cash or equivalent, for the purpose of satisfying, in the adjudged order of priorities, the judgment and decree of foreclosure described herein, together with any additional costs and attorney's fees, including the costs of advertisement and publication for the foregoing sale, and, reasonable receiver and Special Master's fees in an amount to be fixed by the Court. The amount of the judgment due is \$120,724.87, plus interest to and including date of sale in the amount of \$4,704.56, for a total judgment of \$125,429.43.

The foregoing sale may be postponed and rescheduled at the discretion of the Special Master, and is subject to all taxes, utility liens and other restrictions and easements of record, and subject to a one (1) month right of redemption held by the Defendant(s) upon entry of an order approving sale, an order of the Court approving the terms and conditions of sale.

Witness my hand this 23rd day of December, 2021.

/s/ David Washburn  
DAVID WASHBURN, Special Master  
8100 Wyoming Blvd NE  
Suite M-4, Box 272  
Albuquerque, NM 87113  
Telephone: (505) 318-0300  
E-mail: sales@nsi.legal

Published in the Artesia Daily Press, Artesia, N.M., Dec. 30, 2021, Jan 6, 13, 20, 2022 Legal No. 25979.

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Yesterday's answer

- 17 Jockey  
18 Beef cuts  
20 Grinding item  
21 "Skyfall" singer  
22 Track great  
24 Jeans Owens  
25 Runner feature  
26 Dwells on snow  
27 Folds  
31 Takes it easy  
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36 Need to pay  
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Legal Notice

NOTICE OF AIR QUALITY PERMIT APPLICATION

Frontier Field Services, LLC announces its application to the New Mexico Environment Department for an air quality permit for the **modification of its Dagger Draw Gas Plant** facility. The expected date of application submittal to the Air Quality Bureau is **January 7, 2022**.

The exact location for the proposed facility known as, **Dagger Draw Gas Plant**, is at **278 Pipeline Rd, Artesia, NM 88210**. **Facility location:** latitude 32°42'53" and longitude -104°26'45". The approximate location of this facility is **9.2 miles southwest of Artesia in Eddy county**.

The proposed **significant revision** consists of modifying current sources and updating unit nomenclature, installation of an additional Amine unit, installation of six (6) compressor engines, and modifications of emission sources. The estimated maximum quantities of any regulated air contaminant will be as follows in pound per hour (pph) and tons per year (tpy) and could change slightly during the course of the Department's review:

Pollutant:	Pounds per hour	Tons per year
Particulate Matter (PM)	2 pph	9 tpy
PM 10	2 pph	9 tpy
PM 2.5	2 pph	9 tpy
Sulfur Dioxide (SO2)	1 pph	1 tpy
Nitrogen Oxides (NOx)	24 pph	98 tpy
Carbon Monoxide (CO)	23 pph	98 tpy
Volatile Organic Compounds (VOC)	15 pph	87 tpy
Total sum of all Hazardous Air Pollutants (HAPs)	4 pph	17 tpy
Toxic Air Pollutant (TAP)	n/a	1,120 tpy
Green House Gas Emissions as Total CO2e	2 pph	9 tpy

The standard operating schedule of the facility will be 24 hours a day. 7 days a week and a maximum of 52 weeks per year. The maximum operating schedule will be 24 hours a day, 7 days a week and a maximum of 52 weeks per year.

The owner and/or operator of the Facility is:  
**Frontier Field Services, LLC; 1001 Conoco Road, Maljamar, NM 88264**

If you have any comments about the construction or operation of this facility, and you want your comments to be made as part of the permit review process, you must submit your comments in writing to this address: Permit Programs Manager; New Mexico Environment Department; Air Quality Bureau; 525 Camino de los Marquez, Suite 1; Santa Fe, New Mexico; 87505-1816; (505) 476-4300; 1 800 224-7009; https://www.env.nm.gov/aqb/permit/aqb\_draft\_permits.html. Other comments and questions may be submitted verbally.

Please refer to the company name and site name, or send a copy of this notice along with your comments, since the Department may have not yet received the permit application. Please include a legible return mailing address with your comments. Once the Department has performed a preliminary review of the application and its air quality impacts, the Department's notice will be published in the legal section of a newspaper circulated near the facility location.

General information about air quality and the permitting process can be found at the Air Quality Bureau's web site. The regulation dealing with public participation in the permit review process is 20.2.72.206 NMAC. This regulation can be found in the "Permits" section of this web site.

Atención

Este es un aviso de la oficina de Calidad del Aire del Departamento del Medio Ambiente de Nuevo México, acerca de las emisiones producidas por un establecimiento en esta área. Si usted desea información en español, por favor comuníquese con esa oficina al teléfono 505-476-5557.

Notice of Non-Discrimination

NMED does not discriminate on the basis of race, color, national origin, disability, age or sex in the administration of its programs or activities, as required by applicable laws and regulations. NMED is responsible for coordination of compliance efforts and receipt of inquiries concerning non-discrimination requirements implemented by 40 C.F.R. Part 7, including Title VI of the Civil Rights Act of 1964, as amended; Section 504 of the Rehabilitation Act of 1973; the Age Discrimination Act of 1975, Title IX of the Education Amendments of 1972, and Section 13 of the Federal Water Pollution Control Act Amendments of 1972. If you have any questions about this notice or any of NMED's non-discrimination programs, policies or procedures, or if you believe that you have been discriminated against with respect to a NMED program or activity, you may contact: Kathryn Becker, Non-Discrimination Coordinator, NMED, 1190 St. Francis Dr., Suite N4050, P.O. Box 5469, Santa Fe, NM 87502, (505) 827-2855, nd.coordinator@state.nm.us. You may also visit our website at https://www.env.nm.gov/non-employee-discrimination-complaint-page/ to learn how and where to file a complaint of discrimination.

Published in the Artesia Daily Press, Artesia, N.M., Dec. 30, 2021 Legal No. 25983.

**NMSU Carlsbad-Library Specialist Ld, (Req.#2100559S).** Minimum qualifications include Bachelor's degree in a related field and Three (3) years of experience directly related to the standard duties as outlined. In the Spring of 2022, NMSU Carlsbad will become an independent community college, Southeast New Mexico College. All NMSU Carlsbad employees will transfer to Southeast New Mexico College during this time. Go to <http://jobs.nmsu.edu/postings/42665> to submit an application. For additional information please call Amihan Ty at 575-234-9208 or email [Carlsbad\\_HR@nmsu.edu](mailto:Carlsbad_HR@nmsu.edu). NMSU is an equal opportunity and affirmative action employer.

Legal Notice

NOTICE OF ELECTION OF DIRECTORS FOR DISTRICT #5 OF THE PECOS VALLEY ARTESIAN CONSERVANCY DISTRICT

WHEREAS, it is provided by Section 5 of the Revised Election Code of the Pecos Valley Artesian Conservancy District that the Board of Directors thereof shall publish notice of time and place of holding an election for Directors of the Pecos Valley Artesian Conservancy District.

NOW, THEREFORE, the undersigned members of the Board of Directors of the Pecos Valley Artesian Conservancy District do hereby proclaim and give notice that an election will be held in Director's District #5 for the purpose of electing a Director in said District.

The time, place, election officials, and manner of holding said election, and rules and conduct thereof, shall be as follows:

DATE: January 8, 2022  
HOURS OF VOTING: 8 o'clock A.M. to 6 o'clock P.M.

POLLS OR LOCATION OF BALLOT BOXES: DISTRICT NO. 5

ATOKA FIRE DEPARTMENT  
26 E ATOKA RD.  
ARTESIA, NM 88210

ELECTION JUDGES:  
DISTRICT NO. 5  
Glenda Collins, Judge  
Vivian Ochoa, Clerk  
Virginia Palomin, Clerk

(NOTE: ELECTION OFFICIAL MAY CHANGE WITHOUT NOTICE)

**ABSENTEE VOTING**  
Any qualified elector under this code who resides within the district for which elections are being held; who for any reason or cause is unable to be present to vote at their polling location on Election Day, may apply to the Board of Directors or the Election Administrator for an absentee ballot. If the application is accepted by the Board of Directors or the Election Administrator, the application shall be marked "accepted" and beginning ten days prior to the election the Board of Directors or the Election administrator shall mail the absentee ballot to the address listed on the application. The final day for mailing absentee ballots will be on the Thursday prior to Election Day.

**NOMINATION OF CANDIDATES:**  
Candidates for Directors in the respective District shall be nominated and their names printed upon the official ballots by nomination petitions filed in the office of the Pecos Valley Artesian Conservancy District, 2303 East Second Street, Roswell, New Mexico, at least three days prior to the date set for the election. Any petition containing the signature of not less than twenty-five qualified electors in the District in which it is sought to nominate a candidate, filed within the time above provided, shall be sufficient to nominate such candidate.

**QUALIFICATIONS OF CANDIDATES:**  
Directors, at the time for their election, must be a resident in the District from which elected.

**QUALIFICATION OF VOTERS:**  
Directors shall be elected by the popular vote of the duly registered voters in the respective Director's District.

**BOUNDARIES OF DISTRICT #5**  
All of the Pecos Valley Artesian Conservancy District situated South of Main Street, City of Artesia, New Mexico, being more particularly described as follows: Beginning at the NE corner of Section 18, Township 17 S. Range 27 E. and running West to the NW corner of Section 17, in Township 17 S. Range 25E; thence South along the section line to the NW corner of Section 20, same township; thence East to the NE corner same section; thence South on Section lines 9 miles to Township line; thence West to NE corner Section 6, Township 19S. Range 25E; thence South to the NW corner Section 29, same Township; thence West to Range line; thence South 4 miles to NW corner Section 18, Township 20S., Range 25E.; thence East to the NE corner of Same Section; thence South to SW corner Section 20, same Township; thence East to Range line; thence North to NW corner Section 19, Township 20S., Range 26E.; thence East to a point on the Western Boundary line of the lands withdrawn, condemned or bought by or for the Reclamation Bureau of the US Department of the Interior for th McMillan Reservoir at the NE corner of said Section 19; thence Northward, following said boundary line with it meanders, to the NE corner of Section 19, Township 18S., Range 27E.; thence North on Section line to NE corner of Section 18, Township 17S., Range 27E., to a point of beginning.

Said election will be held and conducted in accordance with the Election Code of the Pecos Valley Artesian Conservancy District, copies of which code may be had upon application to the office of the Pecos Valley Artesian Conservancy District, 2303 East Second Street Roswell, New Mexico.

Dated this 12th day of October 2021.

/s/ Greg Alpers, Chairman /s/ Richard Smith, Secretary-Treasure

Published in the Artesia Daily Press, Artesia, N.M., Dec. 9, 16, 23, 30 2021 and Jan 6, 2022 Legal No. 25954.

GO FOR THE GREEN  
IN THE CLASSIFIEDS

# Section 10

## Written Description of the Routine Operations of the Facility

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**A written description of the routine operations of the facility.** Include a description of how each piece of equipment will be operated, how controls will be used, and the fate of both the products and waste generated. For modifications and/or revisions, explain how the changes will affect the existing process. In a separate paragraph describe the major process bottlenecks that limit production. The purpose of this description is to provide sufficient information about plant operations for the permit writer to determine appropriate emission sources.

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The Dagger Draw Gas Plant currently consists of four natural gas compressor engines, an amine gas treatment system, an Acid Gas Injection Well that controls the acid gas stream from the amine unit, a process Flare, an emergency flare, a glycol dehydration system, and ancillary equipment. The primary function of the plant is to remove  $H_2S$  and  $CO_2$  from sour field gas so that the gas can meet pipeline specifications. The plant has been designated a primary Standard Industrial Classification (SIC) Code of 1311.

The operation of the Dagger Draw Gas Plant is intended to process 90 MMscfd of gas. However, initial operation of the facility will only process 40 MMscfd of the permitted 90 MMscfd as the current equipment onsite has a limited capacity of 40 MMscfd. Once Frontier procures the 90 MMscfd equipment the facility will switch to the full 90 MMscfd capacity as modeled and permitted. The gas will be treated to remove acid gas components, dehydrated to remove water and processed to remove heavy (liquid) hydrocarbons from the gas stream. Several plant systems will be involved to perform these functions.

### **Amine Treating Units (Units AU-1 through AU-3)**

The amine units are designed to remove acid gas components (carbon dioxide, hydrogen sulfide and mercaptans) from the natural gas stream. These components are removed from the natural gas because they are corrosive, hazardous to health, and reduce the heating value of the natural gas stream. In addition, the carbon dioxide can freeze in the cryogenic unit forming dry ice and forcing the shut down of the facility. This is known as the gas sweetening process.

Amine treating is an exothermic chemical reaction process. The treating solution is a mixture of RO water and approximately 28-35% DEA (diethanolamine). This aqueous mixture is regenerated and reused. Lean DEA solution is pumped to the top of the contactor and allowed to flow downward. Sour gas is fed into the bottom of the contactor and flows upward. As the lean DEA solution flows down through the contactor, it comes into contact with the sour gas. The  $H_2S$  and  $CO_2$  react with the amine to form an amine sulfide complex and carbonate. The amine is now known as sour or rich amine and the remaining gas is sweet and continues to the dehydration system.

The rich DEA amine solution is fed into a flash tank. This unit reduces the pressure on the rich amine and allows dissolved gases to vent off. The dissolved gases are usually hydrocarbons. This vented stream is sent to the sour gas system. Due to weak chemical bonds between the sour gas and the DEA amine solution,  $H_2S$  and  $CO_2$  can be stripped from the amine by heating the amine at low pressures. Rich amine is fed into a stripper column known as a regenerator. Steam generated in the amine reboiler passes up through the amine still and removes the acid gases from the rich amine. Hot oil is used to supply heat to the regenerator reboiler.  $H_2S$  and  $CO_2$  (acid gases) exit the top of the regenerator and are sent to the acid gas injection well (AGI). The DEA amine solution is now regenerated and leaves the stripper column to be recirculated to the contactor.

### **Acid Gas Injection Well**

The acid gas removed by the amine units will be disposed of by acid gas injection into a disposal well for a control of 98%. In the event both of the redundant AGI well compressor units go down FL-1 will incinerate the acid gas stream from the amine unit as an emergency event. The acid gas will be compressed in stages from a pressure of 5 PSIG to a final pressure of no more than 1250 PSIG. After compression, the gas must be cooled and any water that is condensed at the higher pressure will be separated. The water is collected and disposed of in a separate disposal well. Should the acid gas compressor shut down for any reason, valves will automatically isolate it. At this point, the acid gas will be diverted to the emergency flare. The acid gas will be enriched with sweet natural gas so that it will burn. The entire system will be shut down in a controlled manner if the acid gas compressor cannot be restarted.

### **Glycol Dehydration Units (Unit DEHY-1 & DEHY-2)**

The glycol dehydration unit will receive up to 90 MMscfd of treated gas (sweet) from the amine unit and reduce the water content of the gas by circulating approximately 5.0 to 6.5 gallons per minute of triethylene glycol (TEG). The gas will pass into

the lower section of the glycol contactor and the TEG will enter the top of the contactor. The gas and liquid will come into contact on trays within the tower and the TEG absorbs the water. The dry gas exits the top of the contactor and moves on to the next processing phase, the molecular sieve dehydration.

The rich glycol is fed into a flash tank. This unit reduces the pressure on the solution and allows dissolved gases to vent off. The dissolved gases are usually hydrocarbons. This low pressure stream is sent to the fuel gas system. The rich glycol is regenerated by passing through a series of heat exchangers to warm the glycol. It then enters the glycol reboiler where it is heated to approximately 400°F to boil the absorbed water out of the solution. By-products that are also absorbed, such as benzene, toluene, ethyl-benzene and xylene (BTEX), are also boiled out of the solution. Since BTEX is considered a harmful component these vapors (including water) will be collected and condensed into a liquid using an air-cooled exchanger and a separator. These liquids are then disposed of in a disposal well. The overall efficiency of the BTEX controls will be maintained at a 95% minimum efficiency.

The glycol unit and the components of the glycol unit are similar to that of an amine unit. Hot oil is the heat source for the glycol regenerator reboiler.

### **Molecular Sieve Dehydration**

Molecular sieve dehydration is used upstream of the cryogenic processes to achieve a -150°F dew point. The process uses two molecular sieve vessels with one vessel in service absorbing moisture from the gas stream and the other vessel in the regeneration mode.

During the regeneration mode, hot, dry gas (regen gas) is passed up through the vessel to drive off the absorbed moisture from the molecular sieve. The gas comes from the discharge of the residue compressors and it is passed through a heat exchanger (heated by hot oil) and a heater to achieve a temperature of approximately 500°F. After the gas passes through the bed it is cooled in an air cooled exchanger. The water in the gas condenses and is separated from the gas stream in a separator. The regen gas has four potential paths depending on the concentration of the sulfur products in the regen gas:

1. Blended with the sales gas at the sales point (outlet of the plant);
2. Routed to the front of the plant for reprocessing;
3. Sold to a third-party for processing; or
4. Treated on-site via AGI system.

### **Cryogenic Unit:**

The cryogenic unit is designed to liquefy natural gas components from the sweet, dehydrated inlet gas by removing work (heat) from the gas by means of the turbo expander. The cryogenic unit recovers natural gas liquids (NGL) by cooling the gas stream to extremely cold temperatures (-150°F) and condensing components such as ethane, propane, butanes and heavier. The gas is cooled by a series of heat exchangers and by lowering the pressure of the gas from approximately 650 PSIG to approximately 180 PSIG. Once the gas has passed through the system of heat exchangers and expansion it is re-compressed using the energy obtained from expanding the gas. Further compression is usually required to enter the pipeline so a standard reciprocating compressor is located at the end of the process.

The gas will flow through the following heat exchangers:

- Gas to Gas Exchanger – This unit exchanges heat from the warm inlet gas and the cold residue gas that has already been expanded. This cools the inlet gas.
- Product Heater – This unit will cool the inlet gas by exchanging heat with the cold liquid product that has been recovered.
- De-Methanizer Reboiler / Side-Reboiler – This unit draws liquid off of the de-methanizer and uses heat from the inlet gas to boil the methane out of the liquid. One stream comes off the side of the tower and one stream comes off of the bottom of the tower. This also cools the inlet gas.

The gas is expanded and recompressed in the expander/compressor. At this point the gas temperature should be at its coldest. The de-methanizer is used to stabilize the liquid. By adding heat to the tower, the methane that has been absorbed in the liquid can be rejected with the residue gas.

### **Residual Compression**

Once the sweet, dry gas exits the cryogenic unit, it needs to be recompressed to approximately 800 to 1200 psi before the gas is sent to the main transportation pipeline. This is accomplished with two 2250 horsepower electric driven compressors.

### **Hot Oil System**

The hot oil system in the plant is used to provide heat to certain processes within the facility. The system will circulate approximately 600 GPM of hot oil and deliver 15.5 MMBTU/hr to other processes. It is a very basic system consisting of the following:

- Natural Gas Fired Heater – This provides heat input into the system by burning natural gas and circulating the oil through the heater. The heater also has a convection section that assists in heating the regeneration gas for the molecular sieve.
- Hot Oil Pumps – These pumps circulate the required amount of hot oil through the system.
- Hot Oil Surge Tank – This tank provides expansion volume for the system. As the system heats up the liquid will expand. This tank allows for the liquid to expand without spilling out of the system.
- Heat Exchangers – A series of exchangers, mainly the amine reboiler, glycol reboiler and regeneration gas heat exchanger that remove heat from the hot oil system and transfer it to the respective process.

The facility is authorized to operate continuously (8,760 hr/yr) at design maximum capacity processing rates. Frontier Field Services will minimize startup and shutdown activities at the facility in accordance with good operating principles and business objectives. This practice will serve to minimize total annual excess emissions from the facility due to startup, shutdown, and maintenance activities.

### **Regen Gas Processing**

During regeneration mode, hot gas is passed up through the vessel to drive the absorbed moisture off of the molecular sieve. The gas comes from the discharge of the residue compressors. The regen gas also drives off any residual sulfur compounds from the mole sieves. Due to the mercaptan content of the regen gas, it does not generally meet pipeline specifications and must be treated. The sulfur compounds must be removed along with the water that was picked up from the mole sieve beds. The regen gas stream volume will range from 1.5 MMscfd to 6.0 MMscfd depending on the volume of the mole sieve beds and the concentration of sulfur compounds in the inlet gas.

### **Sulfur Removal**

AU-1 through AU-3 are amine units that are used to remove H<sub>2</sub>S and CO<sub>2</sub>. The concentrated waste acid gas is then sent to the AGI well. The selective amine will be regenerated using two gas-fired reboilers, rated at 22.4 MMBtu/hr and 3.5 MMBTU/hr reboiler. The regen gas waste stream is composed primarily of sulfur compounds. This stream would be mixed with the acid gas stream produced by the main process amine unit. The acid gas that is removed by the amine unit will normally be disposed of by acid gas injection into a disposal well or, under emergency situations, by incinerating in a flare.

It is assumed that the main process stream removes 100% of all sulfur compounds for ease of measurement and calculations. In fact, the main amine unit removes 99.8% to 99.9% of H<sub>2</sub>S and leaves some mercaptans in the gas stream. These additional sulfur compounds are removed by the mole sieves. This additional sulfur removal process will not generate any additional emissions as the emissions are already accounted for in the sulfur calculations of the main amine process unit.

The facility is authorized to operate continuously (8,760 hr/yr) at design maximum capacity processing rates. Frontier Field Services will minimize startup and shutdown activities at the facility in accordance with good operating principles and business objectives. This practice will serve to minimize total annual excess emissions from the facility due to startup, shutdown, and maintenance activities.

# Section 11

## Source Determination

Source submitting under 20.2.70, 20.2.72, 20.2.73, and 20.2.74 NMAC

Sources applying for a construction permit, PSD permit, or operating permit shall evaluate surrounding and/or associated sources (including those sources directly connected to this source for business reasons) and complete this section. Responses to the following questions shall be consistent with the Air Quality Bureau's permitting guidance, Single Source Determination Guidance, which may be found on the Applications Page in the Permitting Section of the Air Quality Bureau website.

Typically, buildings, structures, installations, or facilities that have the same SIC code, that are under common ownership or control, and that are contiguous or adjacent constitute a single stationary source for 20.2.70, 20.2.72, 20.2.73, and 20.2.74 NMAC applicability purposes. Submission of your analysis of these factors in support of the responses below is optional, unless requested by NMED.

**A. Identify the emission sources evaluated in this section (list and describe): Refer to Table 2-A.**

**B. Apply the 3 criteria for determining a single source:**

**SIC Code:** Surrounding or associated sources belong to the same 2-digit industrial grouping (2-digit SIC code) as this facility, OR surrounding or associated sources that belong to different 2-digit SIC codes are support facilities for this source.

☒ **Yes**      ☐ **No**

**Common Ownership or Control:** Surrounding or associated sources are under common ownership or control as this source.

☒ **Yes**      ☐ **No**

**Contiguous or Adjacent:** Surrounding or associated sources are contiguous or adjacent with this source.

☒ **Yes**      ☐ **No**

**C. Make a determination:**

☒ The source, as described in this application, constitutes the entire source for 20.2.70, 20.2.72, 20.2.73, or 20.2.74 NMAC applicability purposes. If in "A" above you evaluated only the source that is the subject of this application, all "YES" boxes should be checked. If in "A" above you evaluated other sources as well, you must check **AT LEAST ONE** of the boxes "NO" to conclude that the source, as described in the application, is the entire source for 20.2.70, 20.2.72, 20.2.73, and 20.2.74 NMAC applicability purposes.

☐ The source, as described in this application, **does not** constitute the entire source for 20.2.70, 20.2.72, 20.2.73, or 20.2.74 NMAC applicability purposes (A permit may be issued for a portion of a source). The entire source consists of the following facilities or emissions sources (list and describe):



# Section 12

## Section 12.A

### PSD Applicability Determination for All Sources

(Submitting under 20.2.72, 20.2.74 NMAC)

**A PSD applicability determination for all sources.** For sources applying for a significant permit revision, apply the applicable requirements of 20.2.74.AG and 20.2.74.200 NMAC and to determine whether this facility is a major or minor PSD source, and whether this modification is a major or a minor PSD modification. It may be helpful to refer to the procedures for Determining the Net Emissions Change at a Source as specified by Table A-5 (Page A.45) of the EPA New Source Review Workshop Manual to determine if the revision is subject to PSD review.

A. This facility is:

- ☒ a minor PSD source before and after this modification (if so, delete C and D below).
- ☐ a major PSD source before this modification. This modification will make this a PSD minor source.
- ☐ an existing PSD Major Source that has never had a major modification requiring a BACT analysis.
- ☐ an existing PSD Major Source that has had a major modification requiring a BACT analysis
- ☐ a new PSD Major Source after this modification.

B. This facility **[is not]** one of the listed 20.2.74.501 Table I – PSD Source Categories. The “project” emissions for this modification are **significant. [Discuss why.]** The “project” emissions listed below **[do or do not]** only result from changes described in this permit application, thus no emissions from other **[revisions or modifications, past or future]** to this facility. Also, specifically discuss whether this project results in “de-bottlenecking”, or other associated emissions resulting in higher emissions. The project emissions (before netting) for this project are as follows [see Table 2 in 20.2.74.502 NMAC for a complete list of significance levels]:

- a. NOx: **XX.X** TPY
- b. CO: **XX.X** TPY
- c. VOC: **XX.X** TPY
- d. SOx: **XX.X** TPY
- e. PM: **XX.X** TPY
- f. PM10: **XX.X** TPY
- g. PM2.5: **XX.X** TPY
- h. Fluorides: **XX.X** TPY
- i. Lead: **XX.X** TPY
- j. Sulfur compounds (listed in Table 2): **XX.X** TPY
- k. GHG: **XX.X** TPY

C. Netting **[is required, and analysis is attached to this document.] OR [is not required (project is not significant)] OR [Applicant is submitting a PSD Major Modification and chooses not to net.]**

D. BACT is **[not required for this modification, as this application is a minor modification.] OR [required, as this application is a major modification. List pollutants subject to BACT review and provide a full top down BACT determination.]**

E. If this is an existing PSD major source, or any facility with emissions greater than 250 TPY (or 100 TPY for 20.2.74.501 Table 1 – PSD Source Categories), determine whether any permit modifications are related, or could be considered a single project with this action, and provide an explanation for your determination whether a PSD modification is triggered.

# Section 13

## Determination of State & Federal Air Quality Regulations

**This section lists each state and federal air quality regulation that may apply to your facility and/or equipment that are stationary sources of regulated air pollutants.**

Not all state and federal air quality regulations are included in this list. Go to the Code of Federal Regulations (CFR) or to the Air Quality Bureau's regulation page to see the full set of air quality regulations.

### **Required Information for Specific Equipment:**

For regulations that apply to specific source types, in the 'Justification' column **provide any information needed to determine if the regulation does or does not apply. For example**, to determine if emissions standards at 40 CFR 60, Subpart IIII apply to your three identical stationary engines, we need to know the construction date as defined in that regulation; the manufacturer date; the date of reconstruction or modification, if any; if they are or are not fire pump engines; if they are or are not emergency engines as defined in that regulation; their site ratings; and the cylinder displacement.

### **Required Information for Regulations that Apply to the Entire Facility:**

See instructions in the 'Justification' column for the information that is needed to determine if an 'Entire Facility' type of regulation applies (e.g. 20.2.70 or 20.2.73 NMAC).

### **Regulatory Citations for Regulations That Do Not, but Could Apply:**

If there is a state or federal air quality regulation that does not apply, but you have a piece of equipment in a source category for which a regulation has been promulgated, you must **provide the low level regulatory citation showing why your piece of equipment is not subject to or exempt from the regulation. For example** if you have a stationary internal combustion engine that is not subject to 40 CFR 63, Subpart ZZZZ because it is an existing 2 stroke lean burn stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, your citation would be 40 CFR 63.6590(b)(3)(i). **We don't want a discussion of every non-applicable regulation, but if it is possible a regulation could apply, explain why it does not. For example**, if your facility is a power plant, you do not need to include a citation to show that 40 CFR 60, Subpart OOO does not apply to your non-existent rock crusher.

### **Regulatory Citations for Emission Standards:**

**For each unit that is subject to an emission standard in a source specific regulation, such as 40 CFR 60, Subpart OOO or 40 CFR 63, Subpart HH, include the low level regulatory citation of that emission standard.** Emission standards can be numerical emission limits, work practice standards, or other requirements such as maintenance. **Here are examples:** a glycol dehydrator is subject to the general standards at 63.764C(1)(i) through (iii); an engine is subject to 63.6601, Tables 2a and 2b; a crusher is subject to 60.672(b), Table 3 and all transfer points are subject to 60.672(e)(1)

### **Federally Enforceable Conditions:**

All federal regulations are federally enforceable. All Air Quality Bureau State regulations are federally enforceable except for the following: affirmative defense portions at 20.2.7.6.B, 20.2.7.110(B)(15), 20.2.7.11 through 20.2.7.113, 20.2.7.115, and 20.2.7.116; 20.2.37; 20.2.42; 20.2.43; 20.2.62; 20.2.63; 20.2.86; 20.2.89; and 20.2.90 NMAC. Federally enforceable means that EPA can enforce the regulation as well as the Air Quality Bureau and federally enforceable regulations can count toward determining a facility's potential to emit (PTE) for the Title V, PSD, and nonattainment permit regulations.

INCLUDE ANY OTHER INFORMATION NEEDED TO COMPLETE AN APPLICABILITY DETERMINATION OR THAT IS RELEVANT TO YOUR FACILITY'S NOTICE OF INTENT OR PERMIT.

**EPA Applicability Determination Index for 40 CFR 60, 61, 63, etc:** <http://cfpub.epa.gov/adi/>

**Table for STATE REGULATIONS:**

<b><u>STATE REGU- LATIONS</u> CITATION</b>	<b>Title</b>	<b>Applies? Enter Yes or No</b>	<b>Unit(s) or Facility</b>	<b>JUSTIFICATION:  (You may delete instructions or statements that do not apply in the justification column to shorten the document.)</b>
20.2.1 NMAC	General Provisions	Yes	Facility	This facility is authorized under a construction permit. Therefore, this regulation applies.
20.2.3 NMAC	Ambient Air Quality Standards NMAAQs	Yes	Facility	20.2.3 NMAC is a SIP approved regulation that limits the maximum allowable concentration of Total Suspended Particulates, Sulfur Compounds, Carbon Monoxide and Nitrogen Dioxide. The facility meets the maximum allowable concentrations of TSP, SO <sub>2</sub> , H <sub>2</sub> S, NO <sub>x</sub> and CO under this regulation.
20.2.7 NMAC	Excess Emissions	Yes	Facility	This regulation establishes requirements for the facility if operations at the facility result in any excess emissions. The owner or operator will operate the source at the facility having an excess emission, to the extent practicable, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions. The facility will also notify the NMED of any excess emissions per 20.2.7.110 NMAC.
20.2.23 NMAC	Fugitive Dust Control	No	N/A	This facility is not authorized under 20.2.73. Therefore, this regulation does not apply.
20.2.33 NMAC	Gas Burning Equipment - Nitrogen Dioxide	No	N/A	This facility does not have gas burning equipment with a heat input of greater than 1,000,000 million British Thermal Units per year per unit. Therefore, this regulation does not apply.
20.2.34 NMAC	Oil Burning Equipment: NO <sub>2</sub>	No	N/A	This facility does not have oil burning equipment with a heat input of greater than 1,000,000 million British Thermal Units per year per unit. Therefore, this regulation does not apply.
20.2.35 NMAC	Natural Gas Processing Plant – Sulfur	Yes	Facility	This facility is subject to the requirements of NMAC 20.2.35 for “Existing Natural Gas Processing Plants” though parts of the plant for which a modification commenced on or after July 1, 1974 may be “new”.
20.2.37 and 20.2.36 NMAC	Petroleum Processing Facilities and Petroleum Refineries	N/A	N/A	<b>These regulations were repealed by the Environmental Improvement Board. If you had equipment subject to 20.2.37 NMAC before the repeal, your combustion emission sources are now subject to 20.2.61 NMAC.</b>
<a href="#">20.2.38 NMAC</a>	Hydrocarbon Storage Facility	No	N/A	This regulation seeks to minimize H <sub>2</sub> S emissions from hydrocarbon storage facilities. For purposes of this regulation, this facility is a new hydrocarbon storage facility, constructed after Jan. 1 1975. Standards of new tanks batteries are established in 20.2.38.112 NMAC. This facility does not have a crude oil or condensate storage capacity greater than 65,000 gallons (1547.6 bbl) and is therefore not subject to this regulation.
<a href="#">20.2.39 NMAC</a>	Sulfur Recovery Plant - Sulfur	No	N/A	This facility is not a sulfur recovery plant. Therefore, this regulation does not apply.
20.2.61.109 NMAC	Smoke & Visible Emissions	Yes	ENG-1 through ENG-6, H-1 through H-5, FL-1, and FL-2	This facility operates combustion equipment that are subject to this regulation.
20.2.70 NMAC	Operating Permits	No	N/A	This facility was previously permitted unit P137-R3. However, with this NSR significant revision the facility now has a PTE under 100 tpy of any regulated pollutant bringing it under the Title V thresholds. After the NSR permit is issued for this facility it will be requested to remove the Title V permit and as a result will not subject to this regulation.
20.2.71 NMAC	Operating Permit Fees	No	N/A	This facility is not subject to 20.2.70 NMAC and is therefore not subject to this regulation.
20.2.72 NMAC	Construction Permits	Yes	Facility	This facility is permitted under 20.2.72 and is therefore subject to this regulation.



<a href="#"><u>STATE REGU- LATIONS</u></a> CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:  (You may delete instructions or statements that do not apply in the justification column to shorten the document.)
20.2.73 NMAC	NOI & Emissions Inventory Requirements	Yes	Facility	This facility is required to submit an annual emission inventory report pursuant to 20.2.73.300.A(1) NMAC. This regulation applies.
20.2.74 NMAC	Permits – Prevention of Significant Deterioration (PSD)	No	N/A	The facility is a minor source for PSD purposes therefore this regulation is not applicable.
20.2.75 NMAC	Construction Permit Fees	Yes	Facility	This application is being submitted under 20.2.72 and is therefore subject to this regulation.
20.2.77 NMAC	New Source Performance	Yes	ENG-1 through ENG-6	This facility is a stationary source with units that are subject to 40 CFR 60. Therefore, this regulation applies.
20.2.78 NMAC	Emission Standards for HAPS	No	N/A	This facility does not include and equipment subject to 40 CFR 61. Therefore this regulation does not apply.
20.2.79 NMAC	Permits – Nonattainment Areas	No	N/A	This facility is not located in a non-attainment area. Therefore, this regulation does not apply.
20.2.80 NMAC	Stack Heights	No	N/A	This regulation establishes requirements for the evaluation of stack heights and other dispersion techniques. This regulation does not apply as all stacks at the facility will follow good engineering practice.
20.2.82 NMAC	MACT Standards for source categories of HAPS	Yes	ENG-1 through ENG-6, DEHY-1, DEHY-2	This regulation applies to all sources emitting hazardous air pollutants, which are subject to the requirements of 40 CFR Part 63. This facility operates units which are subject to 40 CFR 63. Therefore this regulation applies.

**Table for Applicable FEDERAL REGULATIONS:**

<b><u>FEDERAL REGU- LATIONS CITATION</u></b>	<b>Title</b>	<b>Applies ? Enter Yes or No</b>	<b>Unit(s) or Facility</b>	<b>JUSTIFICATION:</b>
40 CFR 50	NAAQS	Yes	Facility	This regulation defines National Ambient Air Quality Standards (NAAQS). The facility meets all applicable NAAQS for NO <sub>x</sub> , CO, SO <sub>2</sub> , H <sub>2</sub> S, PM <sub>10</sub> , and PM <sub>2.5</sub> under this regulation.
NSPS 40 CFR 60, Subpart A	General Provisions	Yes	ENG-1 through ENG-6	This facility is a stationary source with units that are subject to 40 CFR 60. Therefore, this regulation applies.
NSPS 40 CFR60.40a, Subpart Da	Subpart Da, Performance Standards for <b>Electric Utility Steam Generating Units</b>	No	N/A	This facility does not include any electric utility steam generating units. Therefore, this regulation does not apply.
NSPS 40 CFR60.40b Subpart Db	<b>Electric Utility Steam Generating Units</b>	No	N/A	This facility does not include any electric utility steam generating units. Therefore, this regulation does not apply.
40 CFR 60.40c, Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	Yes	H-4	The hot oil heater at this facility that has a heat duty greater than or equal to 2.9 MW (10 MMBtu/hr). This regulation applies to unit H-4.
NSPS 40 CFR 60, Subpart Ka	Standards of Performance for <b>Storage Vessels for Petroleum Liquids</b> for which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and <b>Prior</b> to July 23, 1984	No	N/A	This facility does not have any tanks with a volume of 420,000 gallons or larger. Therefore, this subpart does not apply.
NSPS 40 CFR 60, Subpart Kb	Standards of Performance for <b>Volatile Organic Liquid Storage Vessels</b> (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced <b>After</b> July 23, 1984	No	N/A	This facility does not have any storage vessels with a volume of 75 cubic meters. Therefore this regulation does not apply.
NSPS 40 CFR 60.330	<b>Stationary Gas Turbines</b>	No	N/A	This facility does not have any stationary turbines. Therefore, this regulation does not apply.

<u>FEDERAL REGU- LATIONS CITATION</u>	<b>Title</b>	<b>Applies ? Enter Yes or No</b>	<b>Unit(s) or Facility</b>	<b>JUSTIFICATION:</b>
Subpart GG				
NSPS 40 CFR 60, Subpart KKK	Leaks of VOC from <b>Onshore Gas Plants</b>	Yes	Facility	This facility is subject to this regulation as it operates sweetening units, dehydration units, and compressors on site.
NSPS 40 CFR Part 60 Subpart LLL	Standards of Performance for <b>Onshore Natural Gas Processing:</b> SO <sub>2</sub> Emissions	No	N/A	The facility is not subject to this subpart as the acid gas is completely reinjected into the geologic formation.
NSPS 40 CFR Part 60 Subpart OOOO	Standards of Performance for Crude Oil and Natural Gas Production, Transmission, and Distribution for which construction, modification or reconstruction commenced after August 23, 2011 and before September 18, 2015	No	N/A	This facility is a gas plant. Therefore, equipment leaks are not subject to this regulation. No compressors at the facility were manufactured after 8/23/2011 and before 9/19/2015. Therefore, no compressors are subject to this regulation.
NSPS 40 CFR Part 60 Subpart OOOOa	Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015	Yes	ENG-1 through ENG-6	The compressors (Units ENG-1 through ENG-6) were constructed/modified after September 18, 2015 and are therefore subject to this regulation.
NSPS 40 CFR 60 Subpart IIII	Standards of performance for Stationary Compression Ignition Internal Combustion Engines	No	N/A	There are no compression ignition engines installed at this facility. Therefore, this regulation does not apply.
NSPS 40 CFR Part 60 Subpart JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines	Yes	ENG-1 through ENG-6	The engines at this facility were manufactured in 2021 after the NSPS JJJJ date of June 12, 2006. The units are therefore subject to this regulation.

<u>FEDERAL REGU- LATIONS CITATION</u>	<b>Title</b>	<b>Applies ? Enter Yes or No</b>	<b>Unit(s) or Facility</b>	<b>JUSTIFICATION:</b>
NSPS 40 CFR 60 Subpart TTTT	Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units	No	N/A	There are no electric generating units at this facility. Therefore, this regulation does not apply.
NSPS 40 CFR 60 Subpart UUUU	Emissions Guidelines for Greenhouse Gas Emissions and Compliance Times for Electric Utility Generating Units	No	N/A	There are no electric generating units at this facility. Therefore, this regulation does not apply.
NSPS 40 CFR 60, Subparts WWW, XXX, Cc, and Cf	Standards of performance for Municipal Solid Waste (MSW) Landfills	No	N/A	This facility is not a Municipal Solid Waste Landfill. Therefore, this regulation does not apply.
NESHAP 40 CFR 61 Subpart A	General Provisions	No	N/A	No units at this facility are subject to any of the subparts of 40 CFR 61. therefore
NESHAP 40 CFR 61 Subpart E	National Emission Standards for <b>Mercury</b>	No	N/A	This facility does not process mercury. Therefore, this regulation does not apply.
NESHAP 40 CFR 61 Subpart V	National Emission Standards for <b>Equipment Leaks</b> (Fugitive Emission Sources)	No	N/A	This facility is not a major source of HAPs. Therefore, this regulation does not apply.
MACT 40 CFR 63, Subpart A	General Provisions	Yes	ENG-1 through ENG-6, DEHY-1, DEHY-2	The compressor engines and TEG dehydrator at this facility are subject to subparts of 40 CFR 63. Therefore, this regulation applies.
MACT 40 CFR 63.760 Subpart HH	<b>Oil and Natural Gas Production Facilities</b>	Yes	DEHY-1, DEHY-2	This facility is subject to the requirements of 40 CFR 63 Subpart HH, which includes requirements applicable to area sources with TEG Dehydrators. The site is not a major source of HAPs, but an area source of HAPs and therefore is subject to this subpart. The dehydrator has the potential to emit less than 1 tpy (0.90 megagram per year) of benzene and is therefore exempt from the requirements of §63.764(d) pursuant to §63.764(e)(1)(ii).

<u>FEDERAL REGU- LATIONS CITATION</u>	<b>Title</b>	<b>Applies ? Enter Yes or No</b>	<b>Unit(s) or Facility</b>	<b>JUSTIFICATION:</b>
MACT 40 CFR 63 Subpart HHH	National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities	No	N/A	This subpart applies to owners and operators of natural gas transmission and storage facilities that transport or store natural gas prior to entering the pipeline to a local distribution company or to a final end user. This facility is not a natural gas transmission facility. Therefore, this regulation does not apply.
MACT 40 CFR 63 Subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Major Industrial, Commercial, and Institutional Boilers & Process Heaters	No	N/A	This facility does not operate and major industrial, commercial, and institutional boilers & process heaters. Therefore, this regulation does not apply.
MACT 40 CFR 63 Subpart UUUUU	National Emission Standards for Hazardous Air Pollutants Coal & Oil Fire Electric Utility Steam Generating Unit	No	N/A	This facility does not operate any coal & oil fire electric utility steam generating units. Therefore, this regulation does not apply.
MACT 40 CFR 63 Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines ( <b>RICE MACT</b> )	Yes	ENG-1 through ENG-6	The compressor engines at this facility are subject to MACT ZZZZ and will comply with this regulation by complying with the requirements of NSPS JJJJ.
40 CFR 64	<b>Compliance Assurance Monitoring</b>	No	N/A	Upon issuance of this permit application this facility will no longer be subject to Title V and so as a result 40 CFR 64 will no longer apply to this facility.
40 CFR 68	<b>Chemical Accident Prevention</b>	Yes	Facility	The facility is an affected facility, as it will use flammable process chemicals such as propane at quantities greater than the thresholds. The facility will develop and maintain an RMP for these chemicals.
Title IV – Acid Rain 40 CFR 72	<b>Acid Rain</b>	No	N/A	This facility does not generate commercial electric power or electric power for sale. Therefore, this regulation does not apply.
Title IV – Acid Rain 40 CFR 73	<b>Sulfur Dioxide Allowance Emissions</b>	No	N/A	This facility does not generate commercial electric power or electric power for sale. Therefore, this regulation does not apply.
Title IV-Acid Rain 40 CFR 75	<b>Continuous Emissions Monitoring</b>	No	N/A	This facility does not generate commercial electric power or electric power for sale. Therefore, this regulation does not apply.

<b><u>FEDERAL REGU- LATIONS</u> CITATION</b>	<b>Title</b>	<b>Applies ? Enter Yes or No</b>	<b>Unit(s) or Facility</b>	<b>JUSTIFICATION:</b>
Title IV – Acid Rain 40 CFR 76	<b>Acid Rain</b> Nitrogen Oxides <b>Emission Reduction Program</b>	No	N/A	This facility does not generate commercial electric power or electric power for sale. Therefore, this regulation does not apply.
Title VI – 40 CFR 82	Protection of <b>Stratospheric Ozone</b>	No	N/A	The facility does not service, maintain, or repair equipment containing refrigerants. Therefore, this regulation does not apply.

# Section 14

## Operational Plan to Mitigate Emissions

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

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- ☐ **Title V Sources** (20.2.70 NMAC): By checking this box and certifying this application the permittee certifies that it has developed an **Operational Plan to Mitigate Emissions During Startups, Shutdowns, and Emergencies** defining the measures to be taken to mitigate source emissions during startups, shutdowns, and emergencies as required by 20.2.70.300.D.5(f) and (g) NMAC. This plan shall be kept on site to be made available to the Department upon request. This plan should not be submitted with this application.
- ☒ **NSR** (20.2.72 NMAC), **PSD** (20.2.74 NMAC) & **Nonattainment** (20.2.79 NMAC) **Sources:** By checking this box and certifying this application the permittee certifies that it has developed an **Operational Plan to Mitigate Source Emissions During Malfunction, Startup, or Shutdown** defining the measures to be taken to mitigate source emissions during malfunction, startup, or shutdown as required by 20.2.72.203.A.5 NMAC. This plan shall be kept on site to be made available to the Department upon request. This plan should not be submitted with this application.
- ☒ **Title V** (20.2.70 NMAC), **NSR** (20.2.72 NMAC), **PSD** (20.2.74 NMAC) & **Nonattainment** (20.2.79 NMAC) **Sources:** By checking this box and certifying this application the permittee certifies that it has established and implemented a Plan to Minimize Emissions During Routine or Predictable Startup, Shutdown, and Scheduled Maintenance through work practice standards and good air pollution control practices as required by 20.2.7.14.A and B NMAC. This plan shall be kept on site or at the nearest field office to be made available to the Department upon request. This plan should not be submitted with this application.
- 

Startup and shutdown procedures are performed according to guidelines, which dictate proper procedural sequence to minimize emissions from the facility during such activities.

Equipment located at the plant is equipped with various safety devices that aid in preventing excess emissions to the atmosphere in the event of an operational emergency. In the event of a malfunction, startup, shutdown, or scheduled maintenance in which emission rates from the facility exceed permitted allowable emissions, Frontier Field Services will notify the AQB in accordance with 20.2.7 NMAC and the equipment responsible for the exceedance will be repaired as soon as possible.

# Section 15

## Alternative Operating Scenarios

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

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**Alternative Operating Scenarios:** Provide all information required by the department to define alternative operating scenarios. This includes process, material and product changes; facility emissions information; air pollution control equipment requirements; any applicable requirements; monitoring, recordkeeping, and reporting requirements; and compliance certification requirements. Please ensure applicable Tables in this application are clearly marked to show alternative operating scenario.

**Construction Scenarios:** When a permit is modified authorizing new construction to an existing facility, NMED includes a condition to clearly address which permit condition(s) (from the previous permit and the new permit) govern during the interval between the date of issuance of the modification permit and the completion of construction of the modification(s). There are many possible variables that need to be addressed such as: Is simultaneous operation of the old and new units permitted and, if so for example, for how long and under what restraints? In general, these types of requirements will be addressed in Section A100 of the permit, but additional requirements may be added elsewhere. Look in A100 of our NSR and/or TV permit template for sample language dealing with these requirements. Find these permit templates at: [https://www.env.nm.gov/aqb/permit/aqb\\_pol.html](https://www.env.nm.gov/aqb/permit/aqb_pol.html). Compliance with standards must be maintained during construction, which should not usually be a problem unless simultaneous operation of old and new equipment is requested.

In this section, under the bolded title “Construction Scenarios”, specify any information necessary to write these conditions, such as: conservative-realistic estimated time for completion of construction of the various units, whether simultaneous operation of old and new units is being requested (and, if so, modeled), whether the old units will be removed or decommissioned, any PSD ramifications, any temporary limits requested during phased construction, whether any increase in emissions is being requested as SSM emissions or will instead be handled as a separate Construction Scenario (with corresponding emission limits and conditions, etc).

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N/A – There are no alternative operating scenarios for this facility.



# Section 16

## Air Dispersion Modeling

- 1) Minor Source Construction (20.2.72 NMAC) and Prevention of Significant Deterioration (PSD) (20.2.74 NMAC) ambient impact analysis (modeling): Provide an ambient impact analysis as required at 20.2.72.203.A(4) and/or 20.2.74.303 NMAC and as outlined in the Air Quality Bureau's Dispersion Modeling Guidelines found on the Planning Section's modeling website. If air dispersion modeling has been waived for one or more pollutants, attach the AQB Modeling Section modeling waiver approval documentation.
- 2) SSM Modeling: Applicants must conduct dispersion modeling for the total short term emissions during routine or predictable startup, shutdown, or maintenance (SSM) using realistic worst case scenarios following guidance from the Air Quality Bureau's dispersion modeling section. Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications ([http://www.env.nm.gov/aqb/permit/app\\_form.html](http://www.env.nm.gov/aqb/permit/app_form.html)) for more detailed instructions on SSM emissions modeling requirements.
- 3) Title V (20.2.70 NMAC) ambient impact analysis: Title V applications must specify the construction permit and/or Title V Permit number(s) for which air quality dispersion modeling was last approved. Facilities that have only a Title V permit, such as landfills and air curtain incinerators, are subject to the same modeling required for preconstruction permits required by 20.2.72 and 20.2.74 NMAC.

What is the purpose of this application?	Enter an X for each purpose that applies
New PSD major source or PSD major modification (20.2.74 NMAC). See #1 above.	
New Minor Source or significant permit revision under 20.2.72 NMAC (20.2.72.219.D NMAC). See #1 above. <b>Note:</b> Neither modeling nor a modeling waiver is required for VOC emissions.	X
Reporting existing pollutants that were not previously reported.	
Reporting existing pollutants where the ambient impact is being addressed for the first time.	
Title V application (new, renewal, significant, or minor modification. 20.2.70 NMAC). See #3 above.	
Relocation (20.2.72.202.B.4 or 72.202.D.3.c NMAC)	
Minor Source Technical Permit Revision 20.2.72.219.B.1.d.vi NMAC for like-kind unit replacements.	
Other: i.e. SSM modeling. See #2 above.	
This application does not require modeling since this is a No Permit Required (NPR) application.	
This application does not require modeling since this is a Notice of Intent (NOI) application (20.2.73 NMAC).	
This application does not require modeling according to 20.2.70.7.E(11), 20.2.72.203.A(4), 20.2.74.303, 20.2.79.109.D NMAC and in accordance with the Air Quality Bureau's Modeling Guidelines.	

**Check each box that applies:**

- ☐ See attached, approved modeling **waiver for all** pollutants from the facility.
- ☐ See attached, approved modeling **waiver for some** pollutants from the facility.
- ☒ Attached in Universal Application Form 4 (UA4) is a **modeling report for all** pollutants from the facility.
- ☐ Attached in UA4 is a **modeling report for some** pollutants from the facility.
- ☐ No modeling is required.

# **AIR DISPERSION MODELING PROTOCOL**

## **NSR Significant Revision Modeling Protocol**

### **Frontier Field Services, LLC Dagger Draw Gas Plant**

**Prepared By:**

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January 2022

Project 213201.0161





## **1. INTRODUCTION**

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### **1.1 Purpose of Modeling**

Dagger Draw Gas Plant (Dagger Draw) is an acid gas processing plant for sweetening, dehydrating, and transport of natural gas as well as production of natural gas liquids owned and operated by Frontier Field Services, LLC. Gas enters the facility through an inlet separator compresses the gas, and cryogenically separates methane (residue gas) from gas liquids. Residue and liquids are transported from the facility by pipeline. The gas plant is located approximately 9.2 miles southwest of Artesia in Eddy County, New Mexico.

Frontier Field Services is submitting an application pursuant to 20.2.72.219.D.1.a NMAC for significant revision of NSR Permit 0001-M8. The purpose of this revision is to update the facility to include four compressor engines, five process heaters, one emergency flare, and one process flare.

Frontier Field Services seeks to demonstrate compliance with the National Ambient Air Quality Standards (NAAQS), New Mexico Ambient Air Quality Standards (NMAAQs), and PSD Increment standards as applicable for the following pollutants and averaging periods: NO<sub>2</sub> (1-hour and annual), CO (1-hour and 8-hour), SO<sub>2</sub> (1-hour, 3-hour, 24-hour, and annual), H<sub>2</sub>S (1-hour), PM<sub>2.5</sub> (24-hour and annual), and PM<sub>10</sub> (24-hour and annual).

### **1.2 Facility Description and Location**

The approximate UTM coordinates of the facility are 551,933 meters east and 3,619,808 meters north with NAD 83 datum at an elevation of approximately 3,4650 feet above mean sea level.

## 2. PROPOSED MODELING

### 2.1 Model Input Options

The latest version of the AERMOD dispersion model (version 21112) will be used for this analysis. The model will be run in regulatory mode with all default options. The ARM2 method will be used to convert NOX to NO2. Default minimum and maximum ambient ratios will be utilized.

Table 1 shows the emission sources and stack parameters which will be modeled.

**Table 1 Emission sources and stack parameters to be included in the air dispersion modeling.**

Equipment	NO <sub>x</sub> lb/hr	CO lb/hr	SO <sub>x</sub> lb/hr	PM <sub>10</sub> lb/hr	PM <sub>2.5</sub> lb/hr	H <sub>2</sub> S lb/hr	Height ft	Temp F	Velocity ft/s	Diam. ft
ENG-1	2.15	3.23	5.56E-03	0.12	0.12	-	25	838	511.21	1.00
ENG-2	2.15	3.23	5.56E-03	0.12	0.12	-	25	838	511.21	1.00
ENG-3	2.15	3.23	5.56E-03	0.12	0.12	-	25	838	511.21	1.00
ENG-4	2.15	3.23	5.56E-03	0.12	0.12	-	25	838	511.21	1.00
ENG-5	3.53	1.06	2.95E-03	0.44	0.44	-	25	515	134.11	1.00
ENG-6	3.53	1.06	2.95E-03	0.441	0.441	-	25	515	134.11	1.00
H-1	2.60	2.19	1.56E-02	0.20	0.20	-	17	600	331.77	1.00
H-2	0.17	0.15	1.05E-03	0.013	0.013	-	17	600	22.22	1.00
H-3	0.37	0.31	2.22E-03	0.028	0.028	-	17	600	47.10	1.00
H-4	1.80	1.51	1.08E-02	0.14	0.14	-	17	600	229.57	1.00
H-5	0.41	0.34	2.44E-03	0.031	0.031	-	17	600	51.84	1.00
FL-1	1.97E-03	9.00E-03	1.37E-04	-	-	-	200	1,832	65.62	5.33
FL-2	0.16	0.73	6.86E-05	-	-	-	100	1,832	65.62	4.00

A downwash analysis using the latest version of BPIP will be conducted and incorporated into the modeling analysis to account for potential effluent downwash due to structures at the facility.

### 2.2 Receptor Grid Description and Elevation Data

The center point of the facility will be designated at 552,108 meters east and 3,619,665 meters north. This center point will serve as the center point for a variable density circular receptor grid. The facility fence line will be modeled using 25 meter grid spacing. A 50 meter grid spacing will extend out to 800 meters in each direction from the facility center point for a very fine grid resolution. A 100 meter grid spacing will extend from 800 meters to 3,000 meters in each direction for a fine grid resolution. A 250 meter grid spacing will extend from 3,000 meters to 6,000 meters in each directions for a medium grid resolution. A 500 meter grid spacing will extend from 6,000 meters to 10,000 meters in each direction for a coarse grid resolution. A 500 meter grid spacing will extend from 10,000 meters to 50,000 meters in each direction for a very coarse grid resolution. It is expected that the highest impacts from the proposed source will be at or near the facility property.

The elevations of receptors and facility sources will be determined using the most recent DEM data currently available.

## **2.3 Meteorological Data**

We will use the Carlsbad 2018 meteorological data set available on the NMED website. We feel that this meteorological set is located in comparable terrain not far from the facility. Therefore, this data is representative of meteorological conditions at the facility.

## **2.4 Significance Analysis and Cumulative Impact Analysis (CIA)**

The modeled ground-level concentrations will be compared to the corresponding significant impact levels (SILs) to determine whether any modeled ground-level concentrations at any receptor locations are greater than the SIL (i.e., “significant” receptors). If the significance analysis reveals that modeled ground-level concentrations for a particular pollutant and averaging period are greater than the applicable SIL, a Cumulative Impact Analysis (CIA) will be performed at the significant receptors.

If significant, the CIA will be performed including impacts from the facility sources and background concentrations. If necessary, the background concentration used for NO<sub>2</sub> will be from the Carlsbad Monitor (5ZR), the SO<sub>2</sub> background concentration will be from the Amarillo Monitor (483751025), the PM<sub>10</sub> and PM<sub>2.5</sub> background concentrations will be from the Hobbs-Jefferson Monitor(5ZS). The inclusion of background concentrations will follow the guidance shown in Table 6C: “Modeling the Design Value Summary (Default Modeling)” from the Modeling Guidelines.

## **2.5 PSD Increment Analysis**

If the results of the ROI analysis for NO<sub>x</sub>, SO<sub>2</sub>, PM<sub>10</sub>, or PM<sub>2.5</sub> indicate concentrations greater than significance levels, PSD increment analysis will be conducted for the appropriate averaging periods. If required, the PSD increment analysis will be conducted including all PSD increment consuming and expanding sources within 25 km of the facility per Table 22 of the Modeling Guidelines. The predicted maximum concentrations will be compared to the appropriate Class II PSD Standard.

## **2.6 Class I Areas Analysis**

The nearest Class I area is Carlsbad Caverns National Park at 57.05 km from the facility. Since this facility is greater than 50 km away from a Class I area and not a major source of emissions PSD Class I Increment modeling is not required. Pollutants will be modeled for significance using the Carlsbad Caverns receptor grid.

**From:** [Adam Erenstein](#)  
**To:** [Sufi.Mustafa@state.nm.us](mailto:Sufi.Mustafa@state.nm.us)  
**Cc:** [Xavier Chavez](#); [Darin Kennard - \(DKennard@durangomidstream.com\)](mailto:DKennard@durangomidstream.com)  
**Subject:** Modeling Protocol: Dagger Draw Gas Plant  
**Date:** Thursday, January 6, 2022 2:13:07 PM  
**Attachments:** [image001.png](#)  
[Dagger Draw GP Modeling Protocol v1.0 2022 0106.pdf](#)

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Hi Sufi,  
Happy new year! Attached is the modeling protocol for the Dagger Draw Gas Plant for your review.  
Please contact me if you have any questions.

Regards,

**Adam Erenstein**

Principal Consultant, Manager of Consulting Services

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# Universal Application 4

## Air Dispersion Modeling Report

Refer to and complete Section 16 of the Universal Application form (UA3) to assist your determination as to whether modeling is required. If, after filling out Section 16, you are still unsure if modeling is required, e-mail the completed Section 16 to the AQB Modeling Manager for assistance in making this determination. If modeling is required, a modeling protocol would be submitted and approved prior to an application submittal. The protocol should be emailed to the modeling manager. A protocol is recommended but optional for minor sources and is required for new PSD sources or PSD major modifications. Fill out and submit this portion of the Universal Application form (UA4), the "Air Dispersion Modeling Report", only if air dispersion modeling is required for this application submittal. This serves as your modeling report submittal and should contain all the information needed to describe the modeling. No other modeling report or modeling protocol should be submitted with this permit application.

### 16-A: Identification

1	Name of facility:	Dagger Draw Gas Plant
2	Name of company:	Frontier Field Services, LLC
3	Current Permit number:	NSR-0001-M7R2
4	Name of applicant's modeler:	Adam Erenstein
5	Phone number of modeler:	505-266-6611
6	E-mail of modeler:	<a href="mailto:aerenstein@trinityconsultants.com">aerenstein@trinityconsultants.com</a>

### 16-B: Brief

1	Was a modeling protocol submitted and approved?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
2	Why is the modeling being done?	Adding New Equipment	
3	Describe the permit changes relevant to the modeling.  Installation/modification of the following units: <ul style="list-style-type: none"><li>• Four (4) Caterpillar G3606LE compressor engines rated at 1775 hp (Units ENG-1 through ENG-4)</li><li>• Two (2) Ajax DPC 2804LE compressor engines rated at 800 hp (Units ENG-5 &amp; ENG-6)</li><li>• One (1) Amine Regenerator heater rated at 22.4 MMBtu/hr (Unit H-1)</li><li>• One (1) TEG Regenerator heater rated at 1.5 MMBtu/hr (Unit H-2)</li><li>• One (1) Molecular Sieve Regen heater rated at 3.18 MMBtu/hr (Unit H-3)</li><li>• One (1) Hot oil heater rated at 15.5 MMBtu/hr (Unit H-4)</li><li>• One (1) Selexol Regenerator heater rated at 3.5 MMBtu/hr (Unit H-5)</li><li>• One (1) Emergency Flare (Unit FL-1)</li></ul>		



	<ul style="list-style-type: none"> <li>One (1) Process Flare (Unit FL-2)</li> </ul>		
4	What geodetic datum was used in the modeling?	NAD83	
5	How long will the facility be at this location?	Indefinitely	
6	Is the facility a major source with respect to Prevention of Significant Deterioration (PSD)?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
7	Identify the Air Quality Control Region (AQCR) in which the facility is located	155	
8	List the PSD baseline dates for this region (minor or major, as appropriate).		
	NO2	3/16/1988	
	SO2	7/28/1978	
	PM10	2/20/1979	
	PM2.5	11/13/2013	
9	Provide the name and distance to Class I areas within 50 km of the facility (300 km for PSD permits).		
	Carlsbad Caverns National Park		
10	Is the facility located in a non-attainment area? If so describe below	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
	N/A		
11	Describe any special modeling requirements, such as streamline permit requirements		
	N/A		

### 16-C: Modeling History of Facility

1	Describe the modeling history of the facility, including the air permit numbers, the pollutants modeled, the National Ambient Air Quality Standards (NAAQS), New Mexico AAQS (NMAAQs), and PSD increments modeled. (Do not include modeling waivers).			
	Pollutant	Latest permit and modification number that modeled the pollutant facility-wide.	Date of Permit	Comments
	CO	0001-M8	3/31/2017	0001-M8 was withdrawn.
	NO <sub>2</sub>	0001-M8	3/31/2017	0001-M8 was withdrawn.
	SO <sub>2</sub>	0001-M8	3/31/2017	0001-M8 was withdrawn.
	H <sub>2</sub> S	0001-M8	3/31/2017	0001-M8 was withdrawn.
	PM2.5	0001-M8	3/31/2017	0001-M8 was withdrawn.
	PM10	0001-M8	3/31/2017	0001-M8 was withdrawn.
	Lead	N/A	N/A	
	Ozone (PSD only)	N/A	N/A	
	NM Toxic Air Pollutants (20.2.72.402 NMAC)	N/A	N/A	

**16-D: Modeling performed for this application**

1	For each pollutant, indicate the modeling performed and submitted with this application. Choose the most complicated modeling applicable for that pollutant, i.e., culpability analysis assumes ROI and cumulative analysis were also performed.					
	Pollutant	ROI	Cumulative analysis	Culpability analysis	Waiver approved	Pollutant not emitted or not changed.
	CO	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	NO <sub>2</sub>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	SO <sub>2</sub>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	H <sub>2</sub> S	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	PM <sub>2.5</sub>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	PM <sub>10</sub>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Lead	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Ozone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
State air toxic(s) (20.2.72.402 NMAC)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**16-E: New Mexico toxic air pollutants modeling**

1	List any New Mexico toxic air pollutants (NMTAPs) from Tables A and B in 20.2.72.502 NMAC that are modeled for this application. N/A – no emissions were modeled as this facility is not a source of TAPs.					
2	List any NMTAPs that are emitted but not modeled because stack height correction factor. Add additional rows to the table below, if required.					
	Pollutant	Emission Rate (pounds/hour)	Emission Rate Screening Level (pounds/hour)	Stack Height (meters)	Correction Factor	Emission Rate/ Correction Factor
	N/A – No TAPs were modeled for this facility. N/A					

**16-F: Modeling options**

1	Was the latest version of AERMOD used with regulatory default options? If not explain below.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
N/A			

**16-G: Surrounding source modeling**

1	Date of surrounding source retrieval	
2	If the surrounding source inventory provided by the Air Quality Bureau was believed to be inaccurate, describe how the sources modeled differ from the inventory provided. If changes to the surrounding source inventory were made, use the table below to describe them. Add rows as needed.	
	AQB Source ID	Description of Corrections
	39003E5	Unit was removed due to improper stack height of over 4176.51 feet, 0 foot diameter stack, and -423.509 Fahrenheit stack temperature.
	39447E13	Unit was removed due to improper stack height of over 4176.51 feet, 0 foot diameter stack, and -423.509 Fahrenheit stack temperature.
	39293C1	Unit was removed due to improper stack height of over 4176.51 feet, 0 foot diameter stack, and -423.509 Fahrenheit stack temperature.
	39270R1	This unit was discontinued in operation with the most recent GCP-O&G application for the facility.
	39270R2	This unit was discontinued in operation with the most recent GCP-O&G application for the facility.
	39270R3	This unit was discontinued in operation with the most recent GCP-O&G application for the facility.
	39270E3	This unit was discontinued in operation with the most recent GCP-O&G application for the facility.
	39270E4	This unit was discontinued in operation with the most recent GCP-O&G application for the facility.

**16-H: Building and structure downwash**

1	How many buildings are present at the facility?	26 buildings are modeled at this facility	
2	How many above ground storage tanks are present at the facility?	11 above ground storage tanks were modeled.	
3	Was building downwash modeled for all buildings and tanks? If not explain why below.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	N/A		
4	Building comments	N/A	

**16-I: Receptors and modeled property boundary**

1	"Restricted Area" is an area to which public entry is effectively precluded. Effective barriers include continuous fencing, continuous walls, or other continuous barriers approved by the Department, such as rugged physical terrain with a steep grade that would require special equipment to traverse. If a large property is completely enclosed by fencing, a restricted area within the property may be identified with signage only. Public roads cannot be part of a Restricted Area. A Restricted Area is required in order to exclude receptors from the facility property. If the facility does not have a Restricted Area, then receptors shall be placed within the property boundaries of the facility.		
	Describe the fence or other physical barrier at the facility that defines the restricted area.		
	A secure chain link fence surrounds the facility, there are three points to enter the facility, but these entry points are locked.		
2	Receptors must be placed along publicly accessible roads in the restricted area. Are there public roads passing through the restricted area?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

3	Are restricted area boundary coordinates included in the modeling files?					Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
4	Describe the receptor grids and their spacing. The table below may be used, adding rows as needed.						
	Grid Type	Shape	Spacing	Start distance from restricted area or center of facility	End distance from restricted area or center of facility	Comments	
	Variable density	Circular	50 m	From restricted facility	800 m from restricted facility		
	Variable density	Circular	100 m	800 m from restricted facility	3,000 m from restricted facility		
	Variable density	Circular	250 m	3,000 m from restricted facility	6,000 m from restricted facility		
	Variable density	Circular	500 m	6,000 m from restricted facility	10,000 m from restricted facility		
	Variable density	Circular	500 m	10,000 m from restricted facility	50,000 m from restricted facility		
5	Describe receptor spacing along the fence line.						
	Along the facility fence line a 25 m spaced boundary receptor grid was applied.						
6	Describe the PSD Class I area receptors.						
	N/A						

### 16-J: Sensitive areas

1	Are there schools or hospitals or other sensitive areas near the facility? If so describe below. This information is optional (and purposely undefined) but may help determine issues related to public notice.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
	N/A		
3	The modeling review process may need to be accelerated if there is a public hearing. Are there likely to be public comments opposing the permit application?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

### 16-K: Modeling Scenarios

1	Identify, define, and describe all modeling scenarios. Examples of modeling scenarios include using different production rates, times of day, times of year, simultaneous or alternate operation of old and new equipment during transition periods, etc. Alternative operating scenarios should correspond to all parts of the Universal Application and should be fully described in Section 15 of the Universal Application (UA3).		
	N/A		
2	Which scenario produces the highest concentrations? Why?		
	N/A		
3	Were emission factor sets used to limit emission rates or hours of operation? (This question pertains to the "SEASON", "MONTH", "HROFDY" and related factor sets, not to the factors used for calculating the maximum emission rate.)	Yes <input type="checkbox"/>	No <input type="checkbox"/>

4	If so, describe factors for each group of sources. List the sources in each group before the factor table for that group. (Modify or duplicate table as necessary. It's ok to put the table below section 16-K if it makes formatting easier.) Sources:											
5	Hour of Day	Factor	Hour of Day	Factor								
	1		13									
	2		14									
	3		15									
	4		16									
	5		17									
	6		18									
	7		19									
	8		20									
	9		21									
	10		22									
	11		23									
	12		24									
	If hourly, variable emission rates were used that were not described above, describe them below.											
N/A												
6	Were different emission rates used for short-term and annual modeling? If so describe below.										Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
N/A												

## 16-L: NO<sub>2</sub> Modeling

1	Which types of NO <sub>2</sub> modeling were used? Check all that apply.			
	<input checked="" type="checkbox"/>	ARM2		
	<input type="checkbox"/>	100% NO <sub>x</sub> to NO <sub>2</sub> conversion		
	<input type="checkbox"/>	PVMRM		
	<input type="checkbox"/>	OLM		
	<input type="checkbox"/>	Other:		
2	Describe the NO <sub>2</sub> modeling. The ARM2 Methodology was used with the default maximum and minimum ambient ratios.			
3	Were default NO <sub>2</sub> /NO <sub>x</sub> ratios (0.5 minimum, 0.9 maximum or equilibrium) used? If not describe and justify the ratios used below.		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
N/A				
4	Describe the design value used for each averaging period modeled. 1-hour: High eighth high Annual: One Year Annual Average			

**16-M: Particulate Matter Modeling**

1	Select the pollutants for which plume depletion modeling was used.			
	<input type="checkbox"/>	PM2.5		
	<input type="checkbox"/>	PM10		
	<input checked="" type="checkbox"/>	None		
2	Describe the particle size distributions used. Include the source of information.			
	N/A. Size distributions were not implemented in this modeling.			
3	Does the facility emit at least 40 tons per year of NO <sub>x</sub> or at least 40 tons per year of SO <sub>2</sub> ? Sources that emit at least 40 tons per year of NO <sub>x</sub> or at least 40 tons per year of SO <sub>2</sub> are considered to emit significant amounts of precursors and must account for secondary formation of PM2.5.		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
4	Was secondary PM modeled for PM2.5?		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
5	If MERPs were used to account for secondary PM2.5 fill out the information below. If another method was used describe below.			
	NO <sub>x</sub> (ton/yr)	SO <sub>2</sub> (ton/yr)	[PM2.5] <sub>annual</sub>	[PM2.5] <sub>24-hour</sub>
	Secondary particulate formation was not investigated as part of this modeling. The EPA document on MERPs Guidance (EPA-454/R-19-003) states thresholds for the use of MERPs which are used in secondary particulate formation analysis. Crestwood is and will remain well below the thresholds for analyzing secondary particulate formation.			

**16-N: Setback Distances**

1	Portable sources or sources that need flexibility in their site configuration requires that setback distances be determined between the emission sources and the restricted area boundary (e.g. fence line) for both the initial location and future locations. Describe the setback distances for the initial location.
	N/A
2	Describe the requested, modeled, setback distances for future locations, if this permit is for a portable stationary source. Include a haul road in the relocation modeling.
	N/A

**16-O: PSD Increment and Source IDs**

1	The unit numbers in the Tables 2-A, 2-B, 2-C, 2-E, 2-F, and 2-I should match the ones in the modeling files. Do these match? If not, provide a cross-reference table between unit numbers if they do not match below.		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	Unit Number in UA-2	Unit Number in Modeling Files		
	FL-1	FL-1		

	FL-2	FL-2			
	ENG-1	ENG-1			
	ENG-2	ENG-2			
	ENG-3	ENG-3			
	ENG-4	ENG-4			
	ENG-5	ENG-5			
	ENG-6	ENG-6			
	H-1	H-1			
	H-2	H-2			
	H-3	H-3			
	H-4	H-4			
	H-5	H-5			
2	The emission rates in the Tables 2-E and 2-F should match the ones in the modeling files. Do these match? If not, explain why below.		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
N/A					
3	Have the minor NSR exempt sources or Title V Insignificant Activities" (Table 2-B) sources been modeled?		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
4	Which units consume increment for which pollutants?				
	Unit ID	NO <sub>2</sub>	SO <sub>2</sub>	PM10	PM2.5
	FL-1	Yes	Yes	No	No
	FL-2	Yes	Yes	No	No
	ENG-1	Yes	Yes	Yes	Yes
	ENG-2	Yes	Yes	Yes	Yes
	ENG-3	Yes	Yes	Yes	Yes
	ENG-4	Yes	Yes	Yes	Yes
	ENG-5	Yes	Yes	Yes	Yes
	ENG-6	Yes	Yes	Yes	Yes
	H-1	Yes	Yes	Yes	Yes
	H-2	Yes	Yes	Yes	Yes
	H-3	Yes	Yes	Yes	Yes
	H-4	Yes	Yes	Yes	Yes
	H-5	Yes	Yes	Yes	Yes
	5	PSD increment description for sources. (for unusual cases, i.e., baseline unit expanded emissions after baseline date).		N/A	
6	Are all the actual installation dates included in Table 2A of the application form, as required? This is necessary to verify the accuracy of PSD increment modeling. If not please explain how increment consumption status is determined for the missing installation dates below.		Yes <input type="checkbox"/>	No <input type="checkbox"/>	

**16-P: Flare Modeling**

1	For each flare or flaring scenario, complete the following			
	Flare ID (and scenario)	Average Molecular Weight	Gross Heat Release (cal/s)	Effective Flare Diameter (m)
	FL-1	16.04	59,269.4 cal/s	0.22
	FL-2	39.99	252,665.9 cal/s	0.42

**16-Q: Volume and Related Sources**

1	Were the dimensions of volume sources different from standard dimensions in the Air Quality Bureau (AQB) Modeling Guidelines?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	If not please explain how increment consumption status is determined for the missing installation dates below.		
	Unit FUG was modeled for 1-HR H <sub>2</sub> S as a volume source.		
2	Describe the determination of sigma-Y and sigma-Z for fugitive sources.		
	The pipe rack height of height of 10 feet from the ground and length of the AGI well inlet area of 88 ft was used as the dimensions of sigma-Y and sigma-Z values for the fugitive source.		
3	Describe how the volume sources are related to unit numbers. Or say they are the same.		
	They are the same.		
4	Describe any open pits.		
	N/A		
5	Describe emission units included in each open pit.		
	N/A		

**16-R: Background Concentrations**

1	Were NMED provided background concentrations used? Identify the background station used below. If non-NMED provided background concentrations were used describe the data that was used.		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	CO: N/A			
	NO <sub>2</sub> : Outside Carlsbad (350151005)			
	PM2.5: Hobbs-Jefferson (350450019)			
	PM10: Hobbs-Jefferson (350250008)			
	SO <sub>2</sub> : N/A			
	Other:			
	Comments:			



2	Were background concentrations refined to monthly or hourly values? If so describe below.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
	N/A		

### 16-S: Meteorological Data

1	Was NMED provided meteorological data used? If so select the station used.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	Carlsbad		
2	If NMED provided meteorological data was not used describe the data set(s) used below. Discuss how missing data were handled, how stability class was determined, and how the data were processed.		
	N/A		

### 16-T: Terrain

1	Was complex terrain used in the modeling? If not, describe why below.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
	Complex terrain was not used in the modeling of this facility.		
2	What was the source of the terrain data?		
	N/A		

### 16-U: Modeling Files

1	Describe the modeling files:		
	File name (or folder and file name)	Pollutant(s)	Purpose (ROI/SIA, cumulative, culpability analysis, other)
	Dagger Draw GP_CO_SIL_2022 0118	CO	SIL
	Dagger Draw GP_PM10_SIL_2022 0118	PM <sub>10</sub>	SIL
	Dagger Draw GP_SOX_SIL_2022 0118	SO <sub>x</sub>	SIL
	Dagger Draw GP_NO2_SIL_2022 0118	NO <sub>2</sub>	SIL
	Dagger Draw GP_NO2_CIA_1HR_2022 0118	NO <sub>2</sub>	CIA
	Dagger Draw GP_NO2_CIA_ANN_2022 0118	NO <sub>2</sub>	CIA/ PSD Class II
	Dagger Draw GP_PM10_CIA_24HR_2022 0118	PM <sub>10</sub>	CIA
	Dagger Draw GP_PM10_Class II_24HR_2022 0118	PM <sub>10</sub>	PSD Class II
	Dagger Draw GP_PM2.5_SIL_2022 0118	PM <sub>2.5</sub>	SIL
	Dagger Draw GP_PM2.5_CIA_24HR_2022 0118	PM <sub>2.5</sub>	CIA

	Dagger Draw GP PM2.5 CIA ANN 2022 0118	PM <sub>2.5</sub>	CIA
	Dagger Draw GP PM2.5 PSD II 24HR 2022 0118	PM <sub>2.5</sub>	PSD Class II
	Dagger Draw GP PM2.5 PSD II ANN 2022 0118	PM <sub>2.5</sub>	PSD Class II
	Dagger Draw GP H2S SIL 2022 0118	H <sub>2</sub> S	SIL
	Dagger Draw GP H2S CIA 2022 0118	H <sub>2</sub> S	CIA

### 16-V: PSD New or Major Modification Applications

1	A new PSD major source or a major modification to an existing PSD major source requires additional analysis. Was preconstruction monitoring done (see 20.2.74.306 NMAC and PSD Preapplication Guidance on the AQB website)?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
2	If not, did AQB approve an exemption from preconstruction monitoring?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
3	Describe how preconstruction monitoring has been addressed or attach the approved preconstruction monitoring or monitoring exemption. N/A		
4	Describe the additional impacts analysis required at 20.2.74.304 NMAC. N/A		
5	If required, have ozone and secondary PM2.5 ambient impacts analyses been completed? If so describe below.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
	N/A		

**16-W: Modeling Results**

1	If ambient standards are exceeded because of surrounding sources, a culpability analysis is required for the source to show that the contribution from this source is less than the significance levels for the specific pollutant. Was culpability analysis performed? If so describe below.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
	N/A		
2	Identify the maximum concentrations from the modeling analysis. Rows may be modified, added and removed from the table below as necessary.		

Pollutant, Time Period and Standard	Modeled Facility Concentration (µg/m3)	Modeled Concentration with Surrounding Sources (µg/m3)	Background Concentration (µg/m3)	Cumulative Concentration (µg/m3)	Value of Standard (µg/m3)	Percent of Standard	Location		
							UTM E (m)	UTM N (m)	Elevation (m)
CO (8-HR) Significance	36.84	-	-	36.84	500	7.37%	552208.00	3619915	1061
CO (1-HR) Significance	71.54	-	-	71.54	2000	3.58%	552158	3619965	1061.77
SO2 (ANNUAL) Significance	0.091	-	-	0.091	1	9.05%	551958.00	3620065	1061
SO2 (24-HR) Significance	0.76	-	-	0.76	5	15.12%	552128.9	3619996.8	1062
SO2 (3-HR) Significance	1.72	-	-	1.72	25	6.90%	552103.9	3619996.7	1062
SO2 (1-HR) Significance	2.37	-	-	2.37	7.8	30.44%	552058	3620015	1062
PM10 (ANNUAL) Significance	0.86	-	-	0.86	1	85.68%	552078.90	3619996.7	1062
NO2 (ANNUAL) NMAAQs	6.89	-	5	11.89	94.0	12.64%	552078.9	3619996.7	1062
NO2 (1-HR) NAAQS	112.22	-	38.70	150.92	188.03	80.26%	552208	3619915	1061
NO2 (ANNUAL) PSD Class II	6.89	-	5	11.89	25	47.55%	552078.9	3619996.7	1062
PM10 (24-HR) NAAQS	5.85	-	37.30	43.15	150	28.77%	552208.00	3619915	1061
PM10 (24-HR) PSD Class II	5.85	5.89	-	5.89	30	19.63%	552208.00	3619915	1061
PM2.5 (ANNUAL) NAAQS	0.86	-	5.90	6.76	12	56.31%	552078.90	3619996.7	1062
PM2.5 (24-HR) NAAQS	6.55	-	13.4	19.95	35	57.01%	552208	3619915	1061
PM2.5 (ANNUAL) Class II	0.86	0.88	-	0.88	4	22.11%	552078.90	3619996.7	1062
PM2.5 (24-HR) PSD Class II	6.55	6.56	-	6.56	9	72.84%	552208	3619915	1061

H2S (1-HR) NMAAQS	28.12	52.42	-	52.42	139.3	37.63%	552208	3620015	1061.75
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**16-X: Summary/conclusions**

1	A statement that modeling requirements have been satisfied and that the permit can be issued.
	Frontier Field Services has demonstrated that the proposed changes to NSR Permit 0001-M7R2 would neither cause nor contribute to an exceedance of the standards for CO, H <sub>2</sub> S, NO <sub>2</sub> , PM <sub>2.5</sub> , PM <sub>10</sub> , and SO <sub>2</sub> .

# Section 17

## Compliance Test History

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

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To show compliance with existing NSR permits conditions, you must submit a compliance test history. The table below provides an example.

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N/A – All engines are new to the facility and therefore have no compliance history to report.

# Section 20

## Other Relevant Information

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**Other relevant information.** Use this attachment to clarify any part in the application that you think needs explaining. Reference the section, table, column, and/or field. Include any additional text, tables, calculations or clarifying information.

Additionally, the applicant may propose specific permit language for AQB consideration. In the case of a revision to an existing permit, the applicant should provide the old language and the new language in track changes format to highlight the proposed changes. If proposing language for a new facility or language for a new unit, submit the proposed operating condition(s), along with the associated monitoring, recordkeeping, and reporting conditions. In either case, please limit the proposed language to the affected portion of the permit.

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No other relevant information is being submitted with this application



## Section 22: Certification

Company Name: Frontier Field Services, LLC

I, Darin B. Kennard, hereby certify that the information and data submitted in this application are true and as accurate as possible, to the best of my knowledge and professional expertise and experience.

Signed this 10<sup>th</sup> day of January, 2022, upon my oath or affirmation, before a notary of the State of

TEXAS

Dar B. Kennard

\*Signature

Darin B. Kennard

Printed Name

1/10/2022

Date

Vice President & GM

Title

Scribed and sworn before me on this 10 day of January, 2022.

My authorization as a notary of the State of Texas expires on the

25 day of February, 2025.

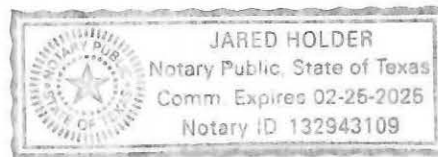
[Signature]  
Notary's Signature

1-10-2022

Date

Jared Holder

Notary's Printed Name



\*For Title V applications, the signature must be of the Responsible Official as defined in 20.2.70.7.AE NMAC.